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2d Session

SENATE

REPORT
101-300

THE MARKET REFORM ACT OF 1990

REPORT

OF THE

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS UNITED STATES SENATE

TO ACCOMPANY

S. 648

together with

ADDITIONAL VIEWS

MAY 22 (legislative day, APRIL 18), 1990.—Ordered to be printed

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Mr. RIEGLE, from the Committee on Banking, Housing, and Urban Affairs, submitted the following

REPORT

together with

ADDITIONAL VIEWS

[To accompany S. 648]

INTRODUCTION

On November 16, 1989, the Senate Committee on Banking, Housing and Urban Affairs marked up and ordered to be reported a bill, the Market Reform Act, to amend the Securities Exchange Act of 1934 to strengthen regulatory oversight of the U.S. securities markets, improve supervision of financial market participants, and improve the safety and efficiency of market mechanisms, and for certain other purposes. The Committee voted to adopt the bill by a voice vote, with one recorded nay, and to report the bill to the Senate.

PURPOSE AND SUMMARY

The Market Reform Act of 1990 is designed to strengthen the system of regulatory oversight over the U.S. securities markets and improve regulatory supervision with respect to the financial integrity of broker-dealers and major market participants, in order to protect investors and ensure the continued vitality of the nation's capital formation mechanisms. The legislation also will promote coordination among market regulators in order to meet the challenges of a rapidly-changing financial marketplace.

For many years, the U.S. securities markets have been considered the fairest, strongest and most liquid capital markets in the

world. Thousands of American businesses have used these markets to raise capital for long-term investments, the production of goods and services, and the creation of jobs for millions of Americans. Indeed, America's securities markets have attracted the savings of millions of Americans, as well as investors throughout the world. The continued vitality of these markets rests on investor confidence in their strength and integrity.

The first federal securities laws were written in the wake of the stock market crash of 1929. With passage of the Securities Act in 1933 and the creation of the Securities and Exchange Commission in the Securities Exchange Act of 1934, Congress recognized that the nation's securities markets are a vital national asset, to be protected and preserved through a system of federal oversight over the markets and securities professionals. The SEC was given broad enforcement powers, as well as broad rulemaking authority, in order to carry out its mission of investor protection. The securities laws have been amended from time to time in response to a constantly changing financial marketplace.

At no time in the nation's history have changes in the capital markets been as rapid and dramatic as in the decade of the 1980's. Trading on the securities exchanges and in the over-the-counter market has grown dramatically. New financial products, such as stock index futures, have linked securities and commodity futures markets through innovative trading strategies on the part of major market participants. Advances in communications and information technology have increased the scope and velocity of securities activity and expanded trading beyond national borders, creating a global securities market. During this period, the U.S. securities market has continued to evolve from a market of primarily individual investors to one dominated by large institutions. With huge pools of cash and the use of computer-driven automated trading strategies, these institutions can rapidly trade millions of shares of stocks and thousands of futures contracts in a matter of seconds. There also has been a restructuring of the securities industry itself. The largest broker-dealers are now part of holding company systems, with unregulated affiliates conducting billions of dollars of potentially high-risk financial activities outside of the supervision of the SEC or other financial regulators. At the same time, the interdependence of securities firms, banks, and other major participants in the financial markets has linked the securities clearance and settlement systems to the financial payments systems, creating the potential for a ripple-effect systemic crisis triggered by the failure of a single large participant.

The 1987 market crash revealed the potential threats to the nation's securities markets posed by this new environment. The 508-point drop in the Dow Jones Industrial Average on October 19, 1987 was the largest single-day market decline in the nation's history. This price movement was accompanied by an extraordinary surge in trading volume and price volatility. On October 19 and 20, 1987, rapid, large stock and futures transactions by institutions pursuing a variety of trading strategies contributed to the swiftness and severity of the market turbulence. Market mechanisms were overwhelmed and, in some cases, failed. Specialists and market makers were confronted with extreme order imbalances on the sell

side. Individual investors found it difficult, and in some cases impossible, to communicate with their brokers and obtain executions on trades. The convergence of these factors caused substantial uncertainty, drove down prices, depleted much of the available liquidity in the markets and generated unprecedented volatility. The dramatic increase in the number of stock transactions contributed to clearance and settlement problems and near gridlock in the financial payments system.

During the most extreme periods of high volume and volatility, market regulators and self-regulatory organizations (SROs) took a number of actions to modify trading hours and other market procedures and to safeguard market mechanisms. Months of analysis followed, and additional actions were taken by regulators and self-regulatory organizations to increase further market capacity and strengthen market mechanisms, to increase capital requirements for market participants, to impose pro-set "circuit-breakers" for periods of extreme price movements, to enhance coordination among market regulators, and to improve the efficiency of the clearance and settlement systems.

However, as shown by the market turbulence of October 13 and 16, 1989, there continue to be periods of sharp price movements and extreme volatility in the securities markets. Many individual investors withdrew from the market in 1987 and have not returned. Investor confidence was further shaken by the events of October 1989. New issues of securities fell sharply after the 1987 market crash and have not returned to pre-crash levels. While systems enhancements and other changes have made market mechanisms more resilient, there are a number of critically important areas where legislation is needed to modernize the SEC's authority to protect investors and preserve the integrity of the nation's capital markets in the current fast-moving and volatile environment.

The Market Reform Act provides the SEC with additional authority to address a number of the dramatic changes that have taken place in U.S. securities markets. The Act has five major purposes. First, it clarifies and broadens the SEC's authority to take appropriate actions to ensure fair and orderly markets during periods of market stress. Second, it enhances the SEC's ability to obtain information necessary to monitor the activities and assess the impact of large traders and to detect manipulative or other illegal trading activity. Third, the Act enhances the SEC's ability to identify and evaluate risks to the financial integrity of broker-dealers within holding company systems. A fourth major objective of the Act is to strengthen the coordination of clearance and settlement systems for stocks, options and futures and thereby reduce threats to the financial system as a whole. Finally, the Act promotes greater coordination among market regulators by requiring periodic reporting by financial regulators on a range of issues affecting the nation's securities markets and investors.

Regulatory responsiveness to market emergencies.—(Section 2.) The events of October 1987 and October 1989 demonstrated the speed at which a sudden and severe market decline can occur. Those events also demonstrated the self-fulfilling nature of a market panic, with large traders rushing to sell, creating further downward pressure on prices, often triggering certain types of

"program" trades that are pre-set at certain price levels, creating still greater volume and volatility. The events of 1987 and 1989 also demonstrated the need for regulatory flexibility to take emergency action to enable market participants and market mechanisms to cope with unusual volume or price volatility.

The SEC currently has authority to halt trading in individual stocks. The SEC also has the authority to halt trading market-wide, subject to the approval of the President, although the SEC has never used this authority. The SEC also may request that the self-regulatory organizations halt trading or modify their rules with respect to trading hours, settlement procedures, or other matters subject to their jurisdiction. However, the SEC does not have sufficient regulatory flexibility to initiate certain actions that may be necessary during a market crisis.

Section 2 of the Act would clarify and broaden the authority of the SEC to suspend trading and take certain other temporary action during market emergencies. This provision would clarify the SEC's ability to halt trading, market-wide, during a major market disturbance, provided that the President does not object to the action. In addition, Section 2 provides the SEC with authority to take other temporary emergency action to alter, supplement, suspend, or impose requirements or restrictions with respect to hours of trading, position limits, clearance and settlement procedures, and other matters under its jurisdiction. This action could be taken only if there were a major market disturbance characterized by, or constituting, a substantial threat of sudden and excessive fluctuations of securities prices generally that threaten fair and orderly markets, or a substantial disruption of the safe or efficient operation of the national system for clearance and settlement of securities.

Monitoring the activity of large traders in the securities markets, detecting manipulation and other illegal trading activity.—(Section 3.) During the market turbulence of October 1987 and October 1989, the speed and severity of price movements was exacerbated and, at certain times, led by the selling pressure generated by certain institutional traders and other major market participants. During the periods of greatest market stress, however, the SEC did not have access to information regarding the major buyers and sellers and their trading strategies. Moreover, following these market disturbances, reconstruction of trading activity by the SEC and others attempting to analyze these events took many weeks. Even after the information was collected and submitted to the SEC, the information produced by some major broker-dealers was incomplete and inaccurate. Thus, the SEC was hampered in dealing with the ongoing crises, as well as in evaluating the causes of the market disturbances following the events.

As the primary regulator of the nation's securities markets, the SEC must have sufficient information to address crisis situations and to evaluate the causes of volatility and market disruptions. In addition, information concerning large traders is critical to the SEC's mission to ensure that the markets are fair to all investors. Large scale trading activity presents the potential for manipulative or other illegal activity, such as front-running. Without timely access to large trader information, the SEC and the SROs must

devote valuable resources to the time-consuming process of reconstructing trades for their law enforcement efforts.

Section 3 of the Act gives the SEC the tools to assess the impact of large traders in the securities market and to detect better manipulative and other illegal trading activity. Under this provision, the SEC specifically is authorized to establish an information-gathering and reporting system to assist the agency in reconstructing trading activities in periods of market stress and for surveillance, enforcement and other purposes. Traders who exceed certain levels of trading activity prescribed by the SEC would report their identity to the SEC. Broker-dealers would keep records of the activity of these large traders, which would be readily available to the SEC. In implementing this provision, every effort should be made to minimize the economic burdens of record-keeping and reporting, while at the same time furnishing the SEC with authority to obtain the information it needs to evaluate market activity and enforce the securities laws.

Assessing the financial integrity of broker-dealers and major markets participants.—(Section 4.) Over the past decade, an increasing number of broker-dealers have formed holding company systems and have moved potentially risky activities (such as bridge loan financing, interest rate swaps, and foreign currency transactions) outside of the broker-dealer and into affiliates that are not subject to regulatory supervision. Many of these activities may expose the broker-dealer to significant financial risks. In periods of adverse market conditions, such as October 1987 and October 1989, information about the overall financial exposure of broker-dealers and their holding companies is critical to the SEC's ability to assess the financial condition of broker-dealer participants in the marketplace. Indeed, because of the interdependence of securities firms and the commercial banking system, information about major risks to securities firms was important to bank regulators in assessing the potential exposure to depository institutions and to the financial system as a whole. Although, in the past, certain information has been voluntarily produced to the SEC at its request, information has not been, and currently is not, available to the SEC on a complete, timely or mandatory basis. The bankruptcy filing of Drexel Burnham Lambert, Inc. and subsequent liquidation of its securities broker-dealer in February 1990, underscored the need for the SEC to have complete and timely information about risks to broker dealers posed by the actions of their affiliates.

Section 4 of the act gives the SEC specific authority to identify and assess the risks to brokers and dealers resulting from the financial activities of their affiliates. This provision requires registered brokers and dealers to keep records relating to their affiliates' financial and securities activities that are reasonable likely to have a material impact on the financial or operational condition of the brokers and dealers, and to keep records regarding the brokers' and dealers' policies, procedures or systems for monitoring and controlling the risks posed by these activities. Under this provision, the SEC could request summary information on a quarterly or less frequent basis, in order to obtain early warning of potential risks. In addition, if adverse market conditions or other information prompt concerns about the broker-dealer's financial or operational

condition, the SEC could require more detailed and current information.

Coordinating and strengthening the system for clearance and settlement of securities, options and futures: Protecting the financial payments system.—(Section 5.) The systems for clearance and settlement of stocks, options and futures are the facilities through which billions of dollars of payments flow daily among purchasers, sellers and financial intermediaries. Through these systems, trade data from purchasers and sellers is compared, trades are settled with the transfer of ownership, cash, or margin credit and continuing daily margin payments are made. The securities, options and futures clearing systems are inextricably linked to the financial payments system, through which market participants and customers make their margin and settlement payments.

The enormous market movements that occurred during October 1987 created margin and other settlement obligations that involved extraordinary large cash payments. Although many market participants had offsetting positions in options, futures and stocks, they were unable to use positions in one market to meet margin or settlement requirements in another, because of the separate clearing systems for those markets. This resulted in payment obligations that placed great strains on the nation's payments system, deprived the trading markets of liquidity at a time when it was most needed, and threatened financial gridlock. Although some voluntary agreements for cross-margining between options and futures exchanges and other reforms subsequently have been adopted, Treasury Secretary Brady recently identified clearance and settlement as the "weakest link in the system." The events of October 1987 also revealed that the lack of uniformity and clarity among state laws governing the transfer and pledge of securities causes uncertainty among investors, creditors and financial intermediaries and also detracts from the safety and efficiency of the clearance and settlement system.

Section 5 of the Act addresses these problems by directing the SEC and the Commodity Futures Trading Commission to work to facilitate the establishment of linked or coordinated facilities for the clearance and settlement of transactions in securities, options and futures. In addition, the SEC would be given authority to promulgate rules concerning the transfer and pledge of securities if the SEC finds that the absence of uniform rules impedes the safe and efficient operation of the national system for clearance and settlement of securities.

Need for greater interagency and intermarket coordination.—(Section 6.) The events of October 1987 and the subsequent analyses of those events underscored that the markets for stocks, options and stock index futures are linked by common participants, using common strategies, trading economically comparable financial products. As noted, these events also demonstrated the interdependence of banks, securities firms, futures commission merchants and other market participants. Moreover, developments over the past decade have led to a growing interdependence of global financial markets, linked through information systems, clearance and settlement systems and the international financial payments system. These developments have led market participants, regula-

tors and other experts to recognize the need for greater coordination among financial regulators. Finally, recent events in the securities markets have pointed to the need for ongoing review by the regulators of the adequacy of their existing authority to address new threats to investors and the markets.

Section 6 promotes coordination among U.S. financial regulators. The SEC and CFTC are directed to report to Congress in one year on their progress in coordinating clearance and settlement systems. In addition, the Secretary of the Treasury and the Chairman of the Federal Reserve, SEC and CFTC are directed to report on their efforts to coordinate regulatory activities to ensure the integrity and competitiveness of U.S. financial markets; their efforts to protect the markets and payments systems during market emergencies; their views on the adequacy of margin levels and the use of leverage by market participants; and other issues relating to the soundness, stability and integrity of domestic and international capital markets. Finally, the SEC is directed to report on the adequacy of its existing authority to address fraudulent or manipulative activity, or other activity harmful to investors, in connection with program trading.

History of the Legislation

The Market Reform Act of 1989, S. 648, was introduced by Senators Dodd and Heinz on March 17, 1989. The legislation had been submitted to Congress by the Securities and Exchange Commission on June 23, 1988, and contained certain recommendations for legislative reforms based on the SEC's analysis of the October 19, 1987 market crash. Prior to and following the submission and introduction of the legislation, the Committee reviewed evidence and heard testimony from numerous regulators, market participants and other experts on the causes of the market crash and the need for legislation to address weaknesses in market mechanisms and in the market regulatory structure. In addition, the Committee considered further testimony and evidence concerning market conditions and the need for legislation following the market turbulence of October 1989.

The Committee's formal hearings began on November 4, 1987, with a hearing on "Volatility and Panic in the Nation's Financial Markets." S. Hrg. 100-536. SEC Chairman David S. Ruder testified on the SEC's activities during the market crash, his preliminary views on the causes of the market volatility and the steps the SEC was undertaking to analyze the events and to correct weakness in the market system.

On January 8, 1988, the Presidential Task Force on Market Mechanisms submitted its report (Brady Report) on the causes of the market crash, as well as recommendations to correct market and regulatory weaknesses revealed by its analysis of the market events. The Task Force, chaired by Nicholas F. Brady, recommended that "one agency should coordinate the few, but critical, regulatory issues which have an impact across the related market segments and throughout the financial system." In addition, it recommended unified clearing systems and consistent margins across marketplaces, "circuit breaker mechamisms" (such as price limits

and coordinated trading halts), and information systems to monitor transactions and conditions in related markets.

Numerous other reports of the market crash were issued by federal market regulators and various self-regulatory organizations, and Committee members and staff reviewed and considered each of them, including:

—SEC Division of Market Regulation, "The October 1987 Market Break," February 1988 (SEC staff study);

—CFTC Division of Economic Analysis and Division of Trading Markets, "Final Report on Stock Index Futures and Crash Market Activity During October 1987," January 1988 (Final CFTC staff study);

—General Accounting Office, "Financial Markets: Preliminary Observations on the October 1987 Crash," January 26, 1988 (GAO Financial Markets Report);

—Chicago Board of Trade, "Response to the Presidential Task Force on Market Mechanisms," November 25, 1987 (CBOT Report);

—Chicago Merchantile Exchange, "Preliminary Report of the Committee of Inquiry Appointed by the Chicago Merchantile Exchange to Examine the Events Surrounding October 19, 1987," December 22, 1987 (CME Preliminary Report);

—New York Stock Exchange, "An Overview of Program Trading and its Impact on Current Market Practices: A Study Commissioned by the New York Stock Exchange," December 21, 1987 (NYSE Report); and

—Investment Company Institute, "Results of a Special Institute Survey of Stock Market Activity and Shareholder Purchases and Redemptions of Equity-Based Mutual Fund for the Period October 16–26, 1987" November 24, 1987 (ICI Report).

On February 2, 3, 4 and 5, 1988, the Committee held hearings on "Black Monday, The Stock Market Crash of October 19, 1987." S. Hrg. 100-649. On February 2, Nicholas F. Brady testified on the findings and conclusions of the Task Force report and the need for action to address continuing market weakness. In addition, Federal Reserve Chairman Alan Greenspan testified on the actions of the Federal Reserve during the market crash and steps that should be taken to improve market mechanisms. The Federal Reserve offered no legislative recommendation. On February 3, 1989, SEC Chairman Ruder testified on the findings and conclusions of the SEC. The SEC recommended, among other things, private sector reforms and suggested areas for legislation to provide additional authority to the SEC to take emergency action during market disturbances, to obtain information about large traders in the securities and futures markets and to facilitate coordination or consolidation of regulation with respect to stocks, options and futures. The SEC also recommended temporary futures margins increases. Acting CFTC Chairman Kalo Hineman testified on the CFTC's actions and recommendations, and supported the concept of coordination among regulatory agencies. The CFTC offered no legislative recommendations. At the hearings on February 2 and 3, Committee Chairman Proxmire requested that the Federal Reserve, the SEC and the CFTC submit by March 4, 1988 recommendations for legislation

they believed necessary to address problems or weaknesses revealed by their analyses of the market crash.

Witnesses testifying on February 4 were: Leo Melamed, Chairman, Executive Committee of the Chicago Mercantile Exchange, accompanied by John F. Sander, Chairman of the Board, and William J. Brodsky, President and CEO; Joseph R. Hardiman, President, National Association of Securities Dealers, accompanied by Steven L. Hammerman, Chairman of the NASD Board of Governors, and Frank J. Wilson, NASD Executive Vice President and General Counsel; Kenneth R. Leibler, President of the American Stock Exchange, accompanied by Richard Scribner, Senior Vice President; and Karsten Mahlmann, Chairman, Chicago Board of Trade, accompanied by Thomas R. Donovan, President and Chief Executive Officer. These witnesses testified about the activities of the self-regulatory organizations during and subsequent to the market crash, as well as their findings and recommendations. On February 5, New York Stock Exchange Chairman John J. Phelan Jr. testified on the findings and conclusions of the NYSE study of program trading, and the market crash, as well as steps being taken by the NYSE to address problems revealed by its study. In addition, Richard L. Fogel, Assistant Comptroller, General Accounting Office, accompanied by John R. Schultz and Craig A. Simmons, testified on the GAO's findings and recommendations.

On March 18, 1988, the President issued Executive Order 12631 which established the Working Group on Financial Markets (Working Group). This group, chaired by Under Secretary of the Treasury George D. Gould and including the Chairmen of the Federal Reserve, the SEC and CFTC, was ordered to "report to the President initially within 60 days (and periodically thereafter) on its progress and, if appropriate, its views on any recommended legislative changes."

On March 31, 1988, the Committee held a hearing on "Legislative Recommendations Concerning the Stock Market Break of October 19, 1987." S. Hrg. 100-686. Federal Reserve Chairman Greenspan, SEC Chairman Ruder, and CFTC Chairman Wendy L. Gramm, testified. The hearing had been scheduled to review the legislative recommendations by the independent regulatory agencies; however, the witnesses indicated their intention to work within the newly-formed Working Group. In addition, Chairman Ruder also identified areas in which the SEC would make legislative recommendations if the Working Group did not reach a consensus with respect to legislation: (i) emergency authority for the SEC; (ii) large trader reporting; (iii) risk assessment for holding company systems; and (iv) coordinated clearance and settlement. Moreover, Chairman Ruder testified that legislation might be necessary to address inconsistencies in margins for stocks, options and futures, as well as to reconcile jurisdictional concerns over securities derivative products. Chairman Gramm testified that additional legislation was not necessary. Chairman Greenspan testified that the Working Group should provide the appropriate forum for intermarket coordination issues.

On March 31, 1988, Chairman Proxmire and other Senators introduced S. 2256, the "Intermarket Coordination Act of 1988." The legislation sought to address the issue of regulatory fragmentation

by establishing an Intermarket Coordination Committee, made up of the chairmen of the Federal Reserve, the SEC and CFTC. Under the legislation, which closely tracked the recommendations of the Presidential Task Force on Market Mechanisms, the Intermarket Coordination Committee would have been directed to act promptly to harmonize margin requirements across marketplaces, establish circuit breaker mechanisms, improve information systems, coordinate contingency planning, establish methods for detecting improper intermarket trading activity, establish coordination of intermarket clearing and settlement systems, and undertake efforts to coordinate with foreign financial regulators.

Hearings on S. 2256 were held on April 19 and May 11, 1988. S. Hrg. 100-688. Witnesses at the April 19 hearings were: John W. Bachmann, Chairman of the Securities Industry Association, accompanied by Edward I. O'Brien, President of the SIA and Jeff Schaffer, Economist for the SIA; John Damgard, President of the Futures Industry Association, accompanied by David Ganis; Robert Rubin, Partner and Co-Chief Operating Officer, Goldman Sachs & Co.; and Thomas A. Russo, Partner, Cadwalader, Wickersham & Taft. Witnesses at the May 11 hearing were: Donald T. Regan, President, Regdon Associates and former Secretary of the Treasury; George L. Ball, Chairman, Prudential-Bache Securities, Inc.; Charles R. Schwab, Chairman and CEO, Charles Schwab & Co.; A. Brean Murray, Chairman and CEO, Brean Murray, Foster Securities, Inc.; Michael J. Reilly, Vice President, Investor Reations, Reuters; and James J. Needham, former Commissioner, SEC. Witnesses voiced differing views on the need for S. 2256 and other possible legislative proposals, as well as on the various steps that had been taken by the regulators, self-regulators and market participants following the market crash.

On May 16, 1988, the Working Group issued its Interim Report (Working Group Report). The report commented on a number of improvements that had been made since the market crash, stated the need for "circuit breakers," and recommended that there be further improvements in the credit, clearing and settlement systems. No legislative recommendations were made in the report.

On May 24, 1988, the Committee held a hearing on "The Conclusions and Recommendations of The President's 'Working Group on Financial Markets.'" S. Hrg. 100-787. Witnesses at the hearing were Treasury Under Secretary for Finance Gould, Federal Reserve Chairman Greenspan, SEC Chairman Ruder, and CFTC Chairman Gramm. Witnesses testified about the substantial progress of private sector and regulatory reforms that had been undertaken since the market crash. Although the Working Group did not make legislative recommendations, Chairman Ruder testified that the SEC continued to believe that legislative reforms were necessary in the areas noted in the March 31 hearing. In addition, Chairman Ruder testified that there should be consolidated regulatory authority over closely-linked markets. Working Group Chairman Gould testified that the Working Group had not yet considered the SEC's proposals but would review them and make recommendations with respect to them at a later time.

On June 23, 1988, the SEC sent to Congress proposed legislation to provide the SEC with the additional authority recommended in

the March 31 and May 4 hearings. On July 6, 1988, the SEC separately submitted legislation to allocate responsibility for setting margins to the securities and commodities self-regulatory organizations, to provide for regulatory oversight of prudential margins by the SEC and the CFTC, and to give residual authority to regulate margin for all purposes to the Federal Reserve. On July 7, 1988, the SEC separately submitted legislation to provide the SEC with regulatory authority over equity and derivative equity instruments—stocks, options, stock index futures, and options on stock index futures.

On March 17, 1989, Senators Dodd and Heinz introduced S. 648, which contained the legislative proposal submitted by the SEC on June 23, 1988. The Securities Subcommittee held a hearing on S. 648 and other legislation on April 18, 1989, as part of hearings on "Reauthorizations For the Securities and Exchange Commission, 1990-92." S. Hrg. 101-131. Chairman Ruder testified that, although a great deal of progress had been made in addressing market weaknesses following the market crash, there was still a need to enact the provisions of S. 648. On May 17, 1989, the SEC submitted revisions to the proposal, with modifications designed to address comments of the CFTC, the Federal Reserve and industry representatives with respect to the provisions of the bill relating to large trader reporting and risk assessment.

On May 18, 1989, the Securities Subcommittee held a second hearing on S. 648. S. Hrg. 101-475. Witnesses at the hearing were: John J. Phelan, Jr., Chairman and CEO of the New York Stock Exchange; Joseph R. Hardiman, President of the National Association of Securities Dealers; Leo Melamed, Chairman of the Executive Committee of the Chicago Mercantile Exchange; George S. Bissell, Chairman and CEO of the Keystone Group Inc., testifying as Chairman of the Investment Company Institute Task Force on Market Reform; and Jeffrey B. Lane, President and Chief Operating Officer of Shearson Lehman Hutton Inc. Testimony was submitted for the record by Charles R. Schwab, Chairman of Charles Schwab & Co., Inc. Witnesses generally supported the legislation, but a number of modifications were suggested by certain witnesses.

Following he hearing, the following additional materials were submitted: letter of July 6, 1989, from First Boston Corporation; letter of September 7, 1989 from the SEC, responding to issues raised by the First Boston letter; letter of October 12, 1989, from First Boston, commenting further on the SEC's response; letter of Septemer 25, 1989, from the National Association of Securities Dealers; letter of October 16, 1989, from The Equitable Life Assurance Society; and letter of October 19, 1989, from Merrill Lynch.

On October 25, 1989, the Department of the Treasury submitted its written views on S. 648. A hearing was held on October 26, 1989, at which Treasury Secretary Nicholas Brady strongly supported the legislation, with certain modifications, and urged passage of the bill as soon as possible. S. Hrg. 101-475. He also testified that the Working Group was undertaking a review of margin levels for stocks and stock derivatives. At the hearing, Committee Chairman Riegle and Securities Subcommittee Chairman Dodd requested that Treasury and SEC officials work quickly to resolve differences with respect to the legislation.

On November 9, 1989, the SEC submitted a revised draft of the legislation, containing modifications responsive to comments by the Treasury Department and to concerns raised by securities industry members about the scope of the provisions of the legislation relating to large trader reporting and risk assessment.

On November 16, 1989, the Committee marked up and passed a substantially revised Committee Print of S. 648, with amendments, by a voice vote with one recorded nay.

Major Developments Affecting U.S. Securities Markets

The U.S. securities markets are a vital national asset. They are the channels through which the savings of millions of Americans flow to meet the capital needs of thousands of American corporations for productive investment, development, growth and job creation. The capital formation process is promoted by the operation of public markets that facilitate the transfer of securities among investors. These trading markets foster investment and the efficient allocation of capital by providing mechanisms that readily establish the current values of securities. Accordingly, the maintenance of fair, efficient and dependable systems for the distribution and trading of securities is critical to the nation's long-term economic growth and national prosperity.

During the past decade, the U.S. securities markets have experienced phenomenal growth. The yearly dollar volume of trading on public equity markets in 1989 was more than four times the level in 1980, increasing from $545 billion to more than $2.3 trillion. The volume of shares traded has also skyrocketed, growing from 23 billion shares in 1980 to 88 billion in 1989. During this same period, the equity capitalization of U.S. corportations grew from $1.6 trillion to $3.7 trillion.[1]

American houeholds shares valued at $1.7 trillion in more than 7,000 companies; almost twice the amount that was invested at the start of the decade. Institutional investments in U.S. stocks have tripled, growing from $600 billion in 1980 to $1.7 trillion in mid-1989.[2] Foreign investors, too, have increased substantially their participation in our markets by investing $251 billion in U.S. corporate equity securities in 1989, up from $65 billion in 1980.

During the decade of the 1980's, a number of developments dramatically changed U.S. securities markets. Large institutional investors and market professionals increasingly dominated trading activity. Enhanced telecommunications technology facilitated the rapid dissemination of information through the markets and permitted the transmission of orders from market participants directly to the point of execution within the markets. Innovative financial instruments enabled securities owners to hedge risks and develop trading strategies linking the stock, options and futures markets. These developments have implications for the U.S. market regulatory structure and are more fully dicussed below.

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[1] Federal Reserve Flow of Funds (net of some intercorporate holdings).

[2] *Id.* These estimates allocates 17 percent of "household and nonprofit institutions" holdings to institutions, in accordance with the Federal Reserve's estimate for the share of nonprofit holdings in 1982.

INSTITUTIONALIZATION [3]

The growth of the U.S. securities markets has coincided with the increasing prominence of large institutional investors on America's financial landscape.[4] There has been a tremendous expansion in the number and size of public and private pension funds, retirement funds, mutual funds, insurance companies, foundations and endowments, and funds managed by banks and other financial institutions.[5] Assets managed by these institutions have swelled from $2.1 trillion in 1981 to an estimated $5.5 trillion in 1989.[6] Almost a third of their total assets are invested in equity securities.[7] At year-end 1989, institutional investors held 47 percent of the market value of all equity securities,[8] and over half of the stock of the 500 largest publicly-owned corporations in the U.S.[9] Moreover, institutional investors now account for almost two-thirds of all trading activity on the NYSE.[10]

These institutions are fiduciaries charged with a responsibility to manage huge pools of assets held for the benefit of others.[11] They have created large diversified investment portfolios allocated among the principal financial assets (*e.g.*, debt, equity, cash and real estate).[12] The securities portfolios of these institutions contain the shares of hundreds of different corporations. As a result of this broad diversification, the value of these equity portfolios move generally in tandem with the movements of the securities markets as a whole.[13]

The increasing size of institutional portfolios has made it difficult for institutions to trade in the stock of a single company without unduly affecting the price of that stock. In addition, many institutional money managers believe it is difficult to select individual stocks that will outperform the market and thus, employed a

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[3] The Securities Subcommittee held hearings on the role of institutional investors in the securities markets on October 3, 1989. *See* "The Impact of Institutional Investors on Corporate Governance, Takeovers, and the Capital Markets" Securities Subcommittee of the Committee on Banking, Housing and Urban Affairs, (October 3, 1989), S. Hrg. 101-497.

[4] The significance of institutional investors in the U.S. securities markets has been addressed in a number of the studies and reports on the October 1987 market crash. *See* Brady Report, Study II, "Historical Perspectives", Section III, "Institutional Trends" at II-12; SEC staff study at 3-1 to 3-2; NYSE Report at 2-5; GAO Financial Markets Report at 24-27.

[5] While there is no standard definition of "institutional investor", it commonly denotes a professional manager of money. *See* C.K. Brancato, "Institutional Investors and Corporate America: Conflicts and Resolutions: An Overview of the Role of Institutional Investors in Capital Markets and Corporate Governance", Institutional Investor Project, Columbia Center for Law and Economics, Columbia University, (prepared at the request of the Subcommittee on Securities, Senate Committee on Banking, Housing, and Urban Affairs) (October 3, 1989) at 1-2, (cited as "Brancato Report"); C.K. Brancato and P.A. Gaughan, "The Growth of Institutional Investors in U.S. Capital Markets", Columbia Center For Law and Economic Studies, Columbia University (November 1988) at 3-4 (cited as "Columbia Report").

[6] *See* Brancato Report at 9-10. *See generally*, SEC staff study at 3-1 to 3-2; GAO Financial Markets Report at 25. 1989 estimates provided by the NYSE.

[7] Federal Reserve, Flow of Funds.

[8] Federal Reserve, Flow of Funds.

[9] Brancato Report, Exhibit 6.

[10] *See* SIA Investor Activity Report, 1989.

[11] *See* Brancato Report at 21-23; Testimony of David P. Feldman, Chairman, Committee on Investment of Employee Benefit Assets, Financial Executives Institute, before the Subcommittee on Securities, Senate Committee on Banking, Housing and Urban Affairs, (October 3, 1989) at 3-6, S. Hrg. 101-497 (cited as Feldman Testimony).

[12] *See* Columbia Report at 26-31, 37-38, 40-50; NYSE Report at 3; GAO Financial Markets Report at 25; Feldman Testimony at 5.

[13] The NYSE Report on the October 1987 market crash stated "[a] large diversified equity portfolio will, almost by definition, move with the market in the short term and may well do so for substantial periods of time." NYSE Report at 25.

strategy to invest in portfolios of securities rather than individual stocks. Accordingly, many institutions have constructed equity portfolios designed expressly to match the overall performance of the securities markets by investing in standardized groups or "baskets" of stocks that correspond with the composition of stock indexes—the generally accepted benchmarks commonly used to measure market performance.[14] This so-called "passive" investment strategy enables institutions to treat a stock index basket as a single investment in the securities markets as a whole.[15] In 1980, institutional money managers reported a total of $9 billion in indexed assets; by May 1989, externally managed index funds had grown to $211 billion.[16]

In the 1980's, institutional investing strategies such as indexing, as well as the large size of portfolios, caused institutions to adopt portfolio trading strategies that involve the simultaneous trading of large blocks of many different stocks. Block trading procedures,[17] which had been developed in the late 1960's to handle large trades in individual securities, could not accommodate these new, index trading strategies. Existing automated order routing systems were enhanced so that institutional investors were able to electronically transmit orders to purchase or sell hundreds of different securities simultaneously. For example, the NYSE augmented its Designated Order Turnaround System (DOT) by developing a List Order Processing feature (LIST) that enabled members to enter an order to buy or sell a list of up to 500 securities.[18] Computer programs permitted the configuration and timing of orders to be set in advance for transmission at the touch of a button.[19] These technological advances facilitated greater levels of what became known as "program trading" by increasing the speed and efficiency with which such trades can be routed and executed.

In 1989, the average volume of program trading was 20.5 million shares a day.[20] Almost 80 percent of all program trading takes

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[14] *See* Columbia Report at 32; SEC staff study at 3-2 to 3-3; NYSE Report at 6, 25; Feldman Testimony at 7.

One of the broader market indexes is the Standard and Poor's 500 (S&P 500) which is composed of the stocks of 500 companies: 400 industrial firms, 40 financial institutions, 40 utilities and 20 transportation companies. The index is capitalization weighted. Capitalization is the price of the stock multiplied by the number of shares outstanding. Brady Report at VI-18 to VI-19.

Other well known stock indexes include the S&P 100; NYSE Composite; Major Market; and Value Line.

[15] *See* Brancato Report at 32-35; NYSE Report at 25; SEC staff study at 3-3.

[16] Brancato Report at 31. As of May 31, 1987, the value of indexed assets owned by U.S. pension funds grew to $188 billion. SEC staff study at 3-3. Recent surveys indicate that by November 1988, 38 percent of institutional investors had at least some of their assets invested in stock index funds. *See Institutional Investor* (November 1988).

[17] In an effort to lessen the potential impact on market prices that can result from transfers of large blocks of stock, large orders are matched and negotiated off the exchange floor, and then brought to the floor for execution. *See* Brady Report at II-12, VI-9; SEC staff study at 3-2; NYSE Report at 5; Colombia Report at 17, 19.

[18] *See* SEC staff study at 1-6. The NYSE developed DOT in 1976 as a small order routing system linking NYSE member firms directly with NYSE specialists. DOT routes orders directly to the specialist's post where each stock is traded and then automatically reports back confirmation of executions to member firms. Since its introduction, DOT has grown to the point where it now handles over 80 percent of all NYSE orders.

[19] While program trading is associated with computer-assisted trading, "[b]roadly defined, program trading is nothing more than buying or selling several stocks simultaneously on a stock exchange." NYSE Report at 10. *See* SEC staff study at 1-1.

[20] Information on the extent of program trading in U.S. markets was not routinely collected until May 1988 when the New York Stock Exchange began collecting information daily on pro-

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place on the NYSE,[21] where it accounted for 9.8 percent of the 165 million share average daily volume on the NYSE in 1989. In 1989, 44.5 percent of program trading was initiated by investors, another 17.5 percent of the trading was done by securities firms to facilitate customer transactions, and 38 percent of program trading was done by securities firms trading for their own account.

DEVELOPMENT OF DERIVATIVE SECURITIES MARKETS

The 1980's also saw the development of new financial instruments in the futures and options markets.[22] In 1982, the futures exchanges introduced futures contracts on stock indexes,[23] and in early 1983, the options exchanges introduced options contracts on stock indexes.[24] Stock index futures and options are so-called *derivative* instruments, because their value is derived from the underlying securities to which they relate.[25]

Stock index futures contracts have proven to be among the most successful products introduced into those markets.[26] Trading in the most popular stock index futures contract, the S&P 500 contract, grew dramatically from 2.9 million contracts in 1982 to a peak of 20 million contracts in 1986.[27] In the first ten months of 1987 the

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gram trading activity. The NYSE issued its first monthly report in mid-August 1988 for program trading that took place in the preceding month of July. Starting in December 1989, the NYSE began issuing its program trading reports on a weekly basis.

In addition, the SEC has issued staff reports on program trading during periods of market volatility. Specifically, the SEC examined program trading on January 8, 1988 when the Dow Jones Industrial Average fell 141 points (a loss of 6.85 percent of market value) and on April 14, 1988 when the Dow fell 101 points (a loss of 4.82 percent of market value).

[21] In 1989, 18.1 percent of all program trading occurred in foreign markets, and 21.7 percent took place on U.S. exchanges other than the NYSE.

[22] *See* Brady Report at VI-18 to VI-30; SEC staff study at 3-1; NYSE Report at 6-10; GAO Financial Markets Report at 27-28.

[23] Stock index futures contracts are standardized agreements that obligate the parties to buy or sell the value of a specific stock index at a specified date in the future. *See* Brady Report at VI-18; NYSE Report at 6-7; GAO Financial Markets Report at 29.

[24] In contrast to futures, stock index options are standardized contracts that provide the owner with the right, but not the obligation, to purchase or sell the value of a specified stock index at a specified price before the date on which the option expires. Brady Report at VI-19; NYSE Report at 7.

[25] Brady Report at VI-18; NYSE Report at 6.

[26] *See* Brady Report at II-12 to II-13; SEC staff study at 3-3 to 3-4; NYSE Report at 8. Currently, there are futures contracts on thirteen stock indexes traded on six futures exchanges. Stock index futures are also traded in markets around the world including Japan, Canada, the United Kingdom, Sweden, Singapore, Hong Kong, Austrailia and New Zeland. *See* Library of Congress, Congressional Research Service, "The Stock Market Crash Revisited", Report 89-628 E, (October 31, 1989) at 14 (cited as "CRS Crash Report").

In 1983 an average of 48,011 stock index futures contracts were traded each day, totalling more than 12 million contracts for the year. Stock index futures trading peaked in 1986 when volume totalled almost 25.4 million contracts, representing an average daily volume of more than 100,000 contracts a day. In 1989, average daily volume fell to 52,741 contracts, representing a total of more than 13.2 million contracts during the year. Overall, stock index futures, as a group, accounted for 12.4 percent of all futures volume in1984, peaking to 13.8 percent of all futures trading in 1985. In 1989, stock index futures volume had fallen to five percent of total futures trading.

In 1984, interms of the number of contracts traded, agricultural futures represented 32.7 percent and interest rate futures accounted for 28 percent of all futures trading. In 1989, in terms of the number of contracts traded, agricultural futures represented 20 percent and interest rate futures accounted for 46 percent of all futures trading.

[27] The S&P 500 stock index future is traded on the Chicago Merchantile Exchange. Annual trading volume in the S&P 500 future contract has been as follows:

Year and annual volume:
1983 8.1 million contracts.
1984 12.4 million contracts.
1985 15.1 million contracts.
1986 19.5 million contracts.

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dollar value of trading in the S&P 500 future was $2.5 trillion—more than one and one half times the dollar value of trading of all stocks traded on the NYSE.[28] Indeed, from 1984 through 1989, the average daily dollar value of trading in S&P 500 futures exceeded the dollar value of all transactions on the NYSE.[29]

There has been a similar explosion in stock index options trading. There was a ten-fold increase in the volume of trading in the most popular stock index options contract, the S&P 100 index option, which grew from 10.6 million contracts in 1983 to a peak of 113 million contracts in 1986.[30] Trading in stock index options in 1987 accounted for almost 43 percent of total options contract volume, dropping to 33 percent of total volume in 1989.[31]

The unparalleled growth in the use of these derivative products stemmed from a number of advantages provided to institutional investors and other large market participants.[32] The costs of executing trades in futures and options contracts can be as little as 5 to 10 percent of the costs of equivalent trading in the securities markets.[33] Initial margins (the amount of cash that the trader must provide) on futures are considerably lower than margins on securities, although the payment period for margins on futures is shorter than that for stocks.[34] In addition, index products can be traded more quickly than the transfer of the individual securities which make up the index.[35] Finally, trading in index futures and options can have a smaller impact on prices in derivative markets than the

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1987 19.0 million contracts.
1988 11.4 million contracts.
1989 10.6 million contracts.

In 1984, trading in the S&P 500 future represented 68 percent of all stock index future trading. In 1989, it represented 79 percent of all stock index futures trading.

[28] Brady Report at II-12. The price of one S&P contract on the CME is $500 times the index, so at 282.25 (the closing price of the S&P 500 futures contract on Friday, October 16, 1987), each contract was worth 500 × 282.25 or $141, 125. Accordingly, a move of one point in the index will reflect a change of $500 in contract value. More recently, at the end of trading on Friday, May 4, 1990, the S&P 500 futures contract closed at 339.90, with a value of $169,950 per contract.

[29] Testimony of Richard C. Breeden, Chairman, Securities and Exchange Commission, before the Securities Subcommittee of the Senate Committee on Banking, Housing, and Urban Affairs, (March 29, 1990).

[30] The S&P 100 stock index option is traded on the Chicago Board Options Exchange. Annual trading volume in the S&P 100 stock index option has been as follows:

Year and annual volume
1983 11 million contracts.
1984 64 million contracts.
1985 91 million contracts.
1986 113 million contracts.
1987 102 million contracts.
1988 57 million contracts.
1989 58 million contracts.

In 1983, 76 percent of all stock index options trading was conducted on the CBOE, increasing to 87 percent in 1989.

[31] Index options are traded on seven exchanges in the U.S., as well as in several foreign countries. CRS Market Crash Report at 15.

[32] *See* Final CFTC staff study at 27; SEC staff study at 3-4 to 3-9; NYSE Report at 8-9.

Large institutions and market professionals with investments in stocks (called "commercial accounts") dominate trading in stock index futures. For example, in 1987, commercial accounts in the S&P 500 future represented approxmiately 50 to 70 percent of the open interests. *See* Interim Report on Stock Index Futures and Cash Market Activity During October 1987 to the Commodity Futures Trading Commission", The Divisions of Economic Analysis and Trading and Markets of the Commodity Futures Trading Commission, (November 9, 1987) at 52-53 (cited as Interim CFTC staff study).

[33] NYSE Report at 8. *See* Final CFTC staff study at 27; SEC staff study at 3-5.

[34] NYSE Report at 8.

[35] *See* Final CFTC staff study at 27; SEC staff study at 3-5 to 3-6; NYSE Report at 8.

sale of a comparable basket of stocks has in the securities markets.[36]

Stock index futures and options have provided market participants with a quick and efficient means to buy or sell the "market."[37] Used alone, these derivative products permit traders to speculate in the direction of broad market movements.[38] When used by the owners of securities, derivative products can be used to provide a hedge against changes in market values.[39] Because they are a surrogate for baskets of stocks, trading in stock index futures and options can act as a means of synthetic entry into or exist from markets in advance of the actual purchase or sale of equity securities.[40]

LINKAGES BETWEEN STOCK, OPTIONS AND FUTURES MARKETS

The interchangeable nature of stock index futures and baskets of stocks, when combined with the advantages of cost and efficiency, led to the development of stock index related trading strategies by institutional investors and market professionals. These trading strategies forged strong linkages among the stock, options and futures markets.[41]

Stock index arbitrage.[42] Trading of the same product in more than one market presents an opportunity to engage in arbitrage. Arbitrage is simply the classic application of an old investment maxim: "buy low and sell high." Profits are made by purchasing a product in one market at a low price and at the same time selling the same product at a higher price in another market. Arbitrage is not only profitable, but also virtually riskless, since the values of the products in both markets are known at the time of the trades. The arbitrage activity tends to drive up the lower prices market while driving down the higher prices market.

With the introduction in the early 1980's of stock index futures and options, three markets trading economically comparable products emerged. With different markets trading stocks (which as a group comprise an index), stock index futures and stock index options (whose values are derived from the underlying stock indexes), disparities among the markets' values of the same stock index presented an opportunity for stock index arbitrage.

By using the individual stock market values of securities comprising an index (called the cash market value), arbitragers can compute the equivalent value of a stock index future (called the theoretical value).[43] When the trading price of the stock index

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[36] *See* Final CFTC staff study at 27; staff study at 3-5; NYSE Report at 8.

[37] Final CFTC staff study at 27-28; Brady Report at 7; SEC staff study at 3-5 to 3-6; NYSE Report at 25.

[38] Final CFTC staff study at 24 n.18; NYSE Report at 9.

[39] Final CFTC staff study at 25; SEC staff study at 3-6; NYSE Report at 9.

[40] Final CFTC staff study at 25; SEC staff study at 1-1, 3-25; NYSE Report at 9.

[41] *See* Brady Report at 55–57; Final CFTC staff study at 27; SEC staff study at 3-3. GAO Financial Markets Report at 29.

[42] Detailed descriptions of stock index arbitrage strategies are contained in many of the studies and reports on the October 1987 market crash. *See* SEC staff study at 1—1 to 1-5; Final CFTC staff study at 29-30; NYSE Report at 11-12; GAO Financial Markets Report at 29-30.

[43] The theoretical value of a stock index future is computed by taking into consideration (1) the value of the cash index, (2) the duration of the futures contract, (3) the relative costs of carrying the stocks or futures and (4) the dividends paid on the stocks in the index. The theoretical

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future exceeds the theoretical value by an amount greater than the cost of effecting the arbitrage, an arbitrager can sell the higher priced future and at the same time purchase the lower priced basket of stocks comprising the index.[44] This locks in a profit equal to the difference in the price of the two equivalent products (minus the transaction cost). Once the arbitrage transaction is completed, the arbitrager is indifferent to changes in market values because any losses in the value of one product will be virtually offset by gains in the other product.[45] An arbitrager can profitably "unwind" the investment by purchasing the future and selling the stocks at any time when the theoretical value equals or exceeds the current market price of the futures contract.[46] The futures price and the cash price will always be equal on the expiration date of the contract, at which time the contract is settled for cash.[47]

Up through 1987, most stock index arbitrage opportunities arose when stock index futures prices were at a premium to stock prices.[48] However, stock index arbitrage can also be accomplished when stock index futures prices are at a discount to stock prices.[49] When that occurs, an arbitrager will buy the stock index future and sell the basket of stocks comprising the stock index. This can be more difficult to complete if an arbitrager does not already own the basket of stocks in the index due to prohibitions against "short sales" on securities exchanges.[50] Short sales (*i.e.*, the sale of stock not owned) are generally not permitted in securities markets when prices are falling.[51]

Initially after the development of stock index futures markets, most stock index arbitrage was conducted by investment banking firms for their own accounts (*i.e.*, proprietary trading), but was not a significant proportion of stock index futures trading until mid-

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value of the stock index future is usually higher than the value of the cash index. The premium diminishes over the three-month duration of the futures contract which at expiration equals the value of the cash index. *See* SEC staff study at 1-3 to 1-4.

The premium of the theoretical value is best explained by comparing relative returns on the ownership of stocks with the ownership of the stock index future. The investor purchasing a basket of stocks comprising an index, at the end a three month period, would have a total investment equal to the value of the stocks plus the dividends received during that period. Using the same amount of funds as the stock owner, an investor could purchase a stock index future by making a small initial margin payment of 5 to 10 percent of the value of the contract and invest the remainder in risk-fee Treasury bills. When the contract expired in three months, the stock index future owner would have a total investment equal to the value of the stocks, plus the interest on the Treasury bills. Consequently, at any given time the theoretical value of the stock index future is the sum of the cash value of the index plus the potential interest earned on Treasury bills for the duration of the contract minus the value of dividends on the stocks in the index. *See* NYSE Report at 34 n. 30 (citing D. Luskin, "Index Options and Futures—The Complete Guide" (1987) at 202–05).

[44] *See* The Final CFTC staff study at 29; SEC staff study at 1-3 to 1-4; NYSE Report at 11-12. The purchase of stocks as part of an arbitrage transaction is known as a "long" index arbitrage. NYSE Report at 11. Until recently this was the most common form of arbitrage. The SEC noted that during five year bull market starting in 1982, stock index futures generally traded at a premium over their theoretical value. SEC staff study at 1.-4.

[45] Final CFTC staff study at 29; SEC staff study at 1-3 to 1-4; NYSE Report at 11-12.

[46] Final CFTC staff study at 29; SEC staff study at 1-4.

[47] The values of stocks index futures are designed to converge to the cash market values at expiration when the contract must be settled. *See* Brady Report at VI-18.

[48] NYSE Report at 1-4.

[49] *See* Final CFTC staff study at 29; SEC staff study at 1-5; NYSE Report at 12.

[50] SEC staff at 1-5; NYSE Report at 12.

[51] Rule 10a-1 under the Securities Exchange Act of 1934 (commonly referred to as the uptick rule or tick test) requires that short sales be executed on a "plus" tick or "zero plus" tick. A plus tick is a trade at a price higher than the immediately preceding trade. A zero plus tick is a trade at a price that is greater than the last transaction at a different price. SEC staff study at 1-5, 3-7.

1984.[52] Stock index arbitrage by institutional investors became more prevalent with the advent of automated order routing systems that enabled the transmission of simultaneous orders for hundreds of stocks.[53] Institutional stock index arbitrage was not impeded by the short sale rule because these investors already owned the baskets of securities required to be sold in connection with the arbitrage transaction. Institutional ownership of stock index portfolios also fostered an increase in arbitrage activity by these investors, because their low transactions costs enable them to capture profits even when disparities between futures and stock market prices were small.[54] In 1989, stock index arbitrage accounted for the single largest portion of all program trading strategies.[55]

Other forms of index arbitrage have been developed. These include "index substitution" [56] and "tactical asset allocation." [57]

Portfolio Insurance.—Institutional investors also developed a number of dynamic hedging strategies involving derivative products, commonly referred to as "portfolio insurance", which attempts to maintain a securities portfolio at a predetermined minimum value.[58] Portfolio insurance employs the use of stock index futures to synthetically reallocate assets between cash and stocks.[59] A fully hedged stock portfolio provides a return similar to the yield on a short term money market instrument.[60] By selling stock index futures in a declining market, institutional investors can synthetically adjust the allocation of their assets to increase cash and reduce equities.[61] In a rising market, assets allocated to

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[52] SEC study at 3-7 to 3-8 n. 32.

[53] SEC study at 3-7.

[54] *See* SEC study at 3-7.

[55] In May 1988, the New York Stock Exchange began routinely collecting information on program trading activity. The NYSE reports indicate that, in the latter part of 1988, index arbitrage activity represented 50.2 percent of daily program trading volume. In 1989, index arbitrage represented 48.2 percent of all program trading activity.

[56] Index Substitution: In 1985, institutional investors developed a form of index arbitrage called "index substitution". In terms of execution and market impact, index substitution and index arbitrage are virtually the same. Index substitution is a strategy used by institutional investors who own portfolios of stocks that mirror the composition of an index. As its name implies, index substitution involves the replacement of baskets of stock comprising an index with stock index futures when the futures are trading at a discount. The stock index futures serve as substitutes for the basket of stocks in portfolios. Proceeds from the sale of stocks not needed for the purchase of stock index futures are invested in short-term money market instruments. The stock index futures can be sold and the stocks repurchased when the futures market and stock market prices of the index are equal. This strategy enables institutional investors to earn a return greater than the performance of the index, because income is supplemented by the interest earned on the money market instruments. SEC staff study at 3-7.

[57] "Tactical asset allocation" refers to a strategy of substituting index futures to alter the size and exposure of equity portfolios. Institutions manage risk and returns on their assets by diversifying their portfolios among the principal financial assets (*e.g.* equity, debt, cash and real estate). The proportion of assets allocated to these various groups is often changed based on considerations of macroeconomic developments, relative returns and market conditions.

Since stock index futures serve as a surrogate for the underlying stocks, institutional investors use futures to alter the size and exposure of their equity portfolios. For example, in anticipation of a decline in stock market prices, institutional investors can use futures to hedge against this downside risk by selling stock index futures. If the market decline occurs, losses on the value of the stocks are offset by increases in the value of the stock index future. Stock index futures can be used in a similar fashion to reduce the risk exposure of a stock portfolio in advance of actually selling the stocks. Final CFTC staff study at 25; SEC staff study at 1-1; NYSE Report at 8-9.

[58] SEC staff study at 1-2; NYSE Report at 11; CRS Market Crash Report at 16.

[59] Final CFTC staff study at 25-26; SEC staff study at 1-2.

[60] A fully hedged position is commonly referred to as "synthetic cash". SEC staff study at 1-2.

[61] Final CFTC staff study at 25-26; SEC staff study at 1-2 and 1-3; NYSE Report at 10-11.

equities can be increased by the purchase of stock index futures. To maintain a minimum portfolio value, an institutional investor must engage in disciplined purchases and sales of stock index futures at pre-set market levels.[62]

Dynamic hedging involving derivative products was used in 1984 to manage approximately $200 million of pension fund assets.[63] By 1986, more than $6 billion in pension funds assets were dynamically hedged with the introduction of a strategy called portfolio insurance.[64] By October 1987, assets subject to portfolio insurance had increased ten-fold to roughly $60 billion.[65]

The use of portfolio insurance declined dramatically after the October 1987 market crash when investors who employed this strategy discovered that the markets could not provide the liquidity necessary to permit rapid sales in a declining market. However, institutional investors continue to use dynamic trading strategies, such as tactical asset allocation.[66] This strategy involves changing allocations of assets among cash, equity and debt portfolios using stock index and Treasury bond futures. This strategy attempts to achieve a minimum rate of return on a diversified portfolio by continously reallocating assets as market conditions change. Tactical asset allocation attempts to take advantage of inefficiencies in the relative prices of different asset classes by identifying undervalued investment groups based on analyses of past performance. By shifting assets to the undervalued group, investment managers seek to maximize returns in anticipation of future changes in asset values.[67] Currently, there is an estimated $40 billion to $50 billion in assets that are managed using tactical asset allocation strategies, an increase of as much as 150 percent since October 1987. The popularity of this investment strategy continues to grow.

VOLUME AND VOLATILITY IN THE MARKETS

Many market observers and participants perceive an increase in the volatility of U.S. securities markets. Stock price volatility can be measured in several ways. Measured on an average basis, empirical studies indicate that daily price changes have not been unusual in recent years.[68] Intraday volatility—market swings during the trading day—was relatively high in 1986, 1987 and early 1988, but has since subsided.[69] What does appear to have changed is the frequency of extreme daily price changes (moves of more than three percent.) Fifteen of the 35 largest price changes since 1955 have oc-

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[62] SEC staff study at 1-3.
[63] SEC staff study at 3-3 to 3-4.
[64] SEC staff study at 3-4.
[65] SEC staff study at 3-4.
[66] NYSE Report at 10-11.
[67] Some experts have observed that, unlike portfolio insurance, which is fundamentally market destabilizing, since it involves selling into a declining market, tactical asset allocation is fundamentally market stabilizing since it involves buying when markets are low and selling when markets are high.
[68] The Brady Commission's review of stock market volatility found that the stock markets were most turbulent during the 1930's and that volatility in recent times is no greater than during periods in the 1940's and 1970's. Brady Report at II-5 to II-6. *See* G.W. Schwert, "Stock Market Volatility," NYSE Working Paper #89-02 (December 1989). *See* also Gregory Duffee, Paul Kupiec, and Patricia White, "A Primer on Program Trading and Stock Price Volatility: A survey of the Issues and the Evidence," Federal Reserve Finance and Economics Discussion Series #109 (January 1990). (cited as Duffee)
[69] Duffee at 12.

curred in the past four years. The causes of these extreme price changes continue to be the subject of examination.

Severe price swings and increased volume have occurred on days when the quarterly expiration of stock index futures, stock index options and equity options coincide. During several of these so-called "Triple Witching Hours" in 1985 and 1986, the NYSE was inundated with last minute orders causing sudden price changes that were often substantially reversed at the start of the next trading day. The influx of orders at the close of trading on expiration days reflected the activities of stock index arbitragers and other traders who sought to ensure that their stock and derivative product transactions were valued simultaneously at the market close.[70]

Working together, the SEC and CFTC encouraged the securities, futures and options exchanges to move the time of contract expirations from the close of the trading day to the opening to enable the exchanges to use existing procedures that deal with order imbalances and to permit price exchanges to be absorbed during an entire trading day. These changes have substantially reduced volatility on expiration days.[71]

U.S. markets also have experienced considerable volatility on non-expiration days. On September 11 and 12, 1986 the Dow fell a total of 120 points on then-record volume. The drop coincided with an unprecedented five point discount of the S&P 500 future to stock index prices. Joint studies by the SEC and CFTC found that changes in investor perceptions were caused primarily by rising interest rates. These changed perceptions were first reflected by declining prices in the futures market and then transmitted to the stock market through stock index arbitrage.[72]

The markets experienced extreme volatility again on January 22 and 23, 1987. On January 22nd, the Dow rose a then-record 52 points, increasing stock prices by 2.5 percent. The Dow's rise continued through the early afternoon on January 23rd, bringing the Dow up another 64 points and increasing stock values a cumulative total of 5.4 percent. However, after this steep rise, the Dow tumbled approximately 115 points in slightly more than an hour. The Dow reversed direction twice more before closing down 44 points for the day. The cause of the abrupt price changes were not apparent. An SEC staff study found that stock index arbitrage did not cause the downturn in prices but, as in the past, acted to transmit the decline that first appeared in the futures market to the stock market.[73]

The October 1987 Stock Market Crash

Between 1982 and 1986, the world witnesses an unprecedented five year international bull market.[74] During this period, the value

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[70] SEC staff study at 1-7 to 1-8; NYSE Report at 21.

[71] SEC staff study at 1-8; NYSE Report at 22.

[72] SEC staff study at 1-8 to 1-9.

[73] *Id.* at 1-8 to 1-9.

[74] *See* Brady Report at I-1 to I-11; T. M. Chuppe, H.R. Haworth, and M. Watkins, "The Securities Markets in the 1980's: A Global Perspective" (January 26, 1989), at 31-36; K. Winch, E. Knight and M. Jickling, "Globalization of the Securities Markets", Library of Congress, Congressional Research Service (prepared at the request of the Subcommittee on Securities, Senate

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of securities traded on the world's stock markets more than doubled from $2.5 trillion to almost $6 trillion.[75] Japan's stock markets grew three-fold from $410 billion to $1.7 trillion, while the value of securities traded in the United Kingdom rose 142 percent to $440 billion. The value of equity securities in U.S. markets grew 73 percent from $1.4 trillion to more than $2.5 trillion. On August 12, 1982 the Dow stood at 777; on August 25, 1987 the Dow reached a record high 2,722.[76]

In just the first eight months of 1987 the Dow surged upward by more than 800 points; a gain of almost 44 percent. However, the market's steep ascent was seemingly not propelled upward by "fundamental" forces alone.[77] By historical measures the market was overvalued. Stocks were trading at an average multiple of 23 times earnings, well above the average post-war price/earnings ratio of 14.5.[78] Dividends were generating an average yield of only 2.2 percent, only about half of the post war average of 4.25 percent.[79] Stocks also appeared overvalued when measures against corporate asset values.[80] The securities markets had become a bubble ready to burst [81]—an "accident waiting to happen." [82]

The stock market weakened substantially during the week of October 5, 1987. The Dow started the week at 2,641. By the close of trading on Friday, October 9th the Dow had fallen 159 points. The following week, starting Wednesday, October 14th and continuing through Friday, October 16th, the Dow registered a wave of successive losses—a record 95 point drop on October 14th; a 58 point decline on October 15th; and a new record loss of 108 points on October 16th. In just three days, stock values had lost 10.4 percent. By the close of trading on that Friday, the market's value had diminished 17.5 percent from the record high reached two months earlier in August.

On "Black Monday", October 19, 1987, U.S. securities markets experienced the largest single loss in history. The Dow plummeted 508 points—a 23 percent loss in value. A record 608 million shares traded on the NYSE. The crash extended to every securities market in the United States and resonated to securities markets around the world. The S&P 500 plunged 20 percent in value. The American Stock Exchange Composite index lost 13 percent, and the over-the-counter market's NASDAQ index declined by more than 11 percent. During October 19 and 20, 1987, London's Financial

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Committee on Banking, Housing and Urban Affairs) (June 7, 1989); Report of the Staff of the U.S. Securities and Exchange Commission to the Senate Committee on Banking Housing and Urban Affairs, Internationalization of the Securities Markets (July 27, 1987) at II-12.

[75] *See* Report of the Staff of the U.S. Securities and Exchange Commission to the Senate Committee on Banking Housing and Urban Affairs, Internationalization of the Securities Markets (July 27, 1987) at II-12.

[76] On January 2, 1990, the Dow attained a new record high of 2,810.

[77] The Brady Report captioned its discussion of the markets rise as "The Levitating Stock Market: Defying Natural Forces." Brady Report at I-4.

[78] *See* GAO Financial Markets Report at 37; NYSE Report at 19.

[79] *See* GAO Financial Markets Report at 37.

[80] In May 1987, the price of the S&P 400 was 2.4 times book value. When compared with inflation-adjusted book value the ratio was .97—the highest level since 1973. Even based on replacement book values, stocks were overpriced. *See* Brady Report at I-3.

[81] The Brady Report captioned its discussion of the events of October 1987 at "Bursting the Bubble: October 1987." Brady Report at I-11.

[82] Testimony of Alan Greenspan, Chairman, Board of Governors of the Federal Reserve Board, Before the Senate Committee on Banking, Housing and Urban Affairs (February 2, 1988), S. Hrg. 100-649 at 86.

Times Stock Index plunged almost 22 percent, while in Japan the Nikkei index fell almost 17 percent.

On "Terrible Tuesday", October 20, 1987, the markets convulsed. In the first hour of trading, the Dow jumped almost 200 points. However, the Dow then went into a "freefall," plunging 227 points in two hours. "By midday . . . the securities markets and the financial system approached breakdown." [83] In the last four hours of trading the Dow recovered 126 points; then fell 80 points; regained nearly 170 points; and then collapsed 80 points before the close. The market's gyrations netted a 102 point gain for the day. Over 614 million shares changed hands—a new record.

In just the four trading days between October 14th to October 19th, the Dow had plunged 770 points—a loss of 31 percent of the market's value. Almost $1 trillion vanished from U.S. securities markets.[84] "Black Monday" and "Terrible Tuesday" raised the specter of a financial collapse that the U.S. had not witnessed in over fifty years since the Great Depression. "The massive volume, violent price volatility, and staggering demands on clearing and credit systems raised the possibility of a full scale financial system breakdown." [85]

In many respects the October 1987 market crash exemplifies developments in recent years that have dramatically changed the way our markets operate. As Secretary Brady testified:

> Within the historical framework, the present decade has seen widespread change in the structure and nature of our financial markets. In fact, not since the sweeping reform brought about by the Securities Acts of 1933 and 1934 has so much change in the functioning of the stock market come about in such a short time.[86]

Institutionalization; technological changes; the introduction of new financial products; the emergence of derivative markets; the development of new trading strategies; the expanded activities of market professionals; increases in trading volume and volatility; and the complexity of clearance and settlement systems were all evident in the events of October 1987.

Institutionalization.—The significant presence of institutions in the markets was apparent during the October market crash. The Brady Commission observed that throughout the period of the market crash: "trading activity was concentrated in the hands of a surprisingly few institutions" [87] who "played the dominant role during this tumultuous period." [88] For example, the Brady report stated that:

> [On October 19th], [t]he record volume was concentrated among relatively few institutions. In the stock market, the top four sellers alone accounted for $2.85 billion, or 14 per-

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[83] Brady Report at 41.
[84] *Id.* at 1.
[85] *Id.* at 69.
[86] Testimony of Nicholas F. Brady, Chairman, The Presidential Task Force on Market Mechanisms, before the Senate Committee on Banking, Housing and Urban Affairs (February 2, 1988), S. Hrg. 100-649 at 40.
[87] Brady Report at v.
[88] *Id.* at 15.

> cent of total sales. The top 15 sellers as a group accounted for $4.1 billion, or about 20 percent of total sales. The top 15 buyers purchased $2.2 billion, almost 11 percent of total volume. In the futures market the top 10 sellers accounted for sales equivalent to $5 billion, roughly 50 percent of the non-market maker total volume.
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> The contribution of a small number of portfolio insurers and mutual funds to the Monday selling pressure is even more striking. Out of total NYSE sales of just under $21 billion, sell programs by three portfolio insurers made up just under $2 billion. Block sales of individual stocks, by a few mutual funds accounted for another $900 million. About 90 percent of these sales were executed by one mutual fund group.[89]

The SEC concluded that on Black Monday "institutional stock selling was the largest single direct factor responsible for the initial opening declines of the popular stock averages: the Dow Jones Industrial Average and the S&P 500" [90] and were "the predominant source of selling pressure throughout the day." [91] All told, institutional accounts were responsible for approximately 50.7 percent of the selling activity on October 19th.[92]

Trading strategies linking markets.—The October market crash vividly highlighted the links among the stock, options and futures markets forged by the development of economically equivalent instruments, institutional stock index ownership, and computer assisted intermarket trading strategies. Portfolio insurance trading strategies, designed to hedge risk and reshuffle huge portfolios, were triggered by continual declines in market values and dictated selling in the futures, options and stock markets.[93] Severe disparities between stock index futures values and stock index values materialized, causing a proliferation of index arbitrage activity during the period October 14 through the morning of October 19. Selling pressures permeated the markets, causing liquidity to evaporate and market values to plunge on the morning of October 19.

The market's crash demonstrated how institutionalization of our markets converged with technological advances to facilitate the rapid transmission of changes in investor perceptions of securities values of our markets. Alan Greenspan, Chairman of the Federal Reserve Board, explained the events of October 19th as follows:

> The severity and rapidity of the plunge on October 19th was, in a sense, the outcome of a confrontation between dramatically changing computer and telecommunications technology and unchanging human nature. . . . The news of sharply falling stock prices, communicated instantly to a sensitive investment community, triggered an avalanche of sell orders on both the futures and stock exchanges.[94]

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[89] *Id.* at 36.
[90] SEC staff study at 3-11.
[91] SEC staff study at 2-19.
[92] SEC staff study at 2-14.
[93] During the October market crash, there was an estimated minimum of $55 billion in assets subject to some type of portfolio insurance program. SEC staff study at 3-4.
[94] Greenspan Testimony, S. Hrg. 100-649 at 20-21.

The market activity on October 19th illustrates how stock index trading strategies are used by institutional investors in reaction to their changed perception of securities values.

On Monday, October 19th, the S&P 500 future opened down over 20 points.[95] In just the first half hour of trading, portfolio insurance sales in the S&P 500 future were the equivalent of almost $400 million representing 28 percent of public volume.[96] On the NYSE, there were large order imbalances, as sell orders equally attributed to index arbitrage and portfolio insurance programs totaled almost $500 million. Although order imbalances prevented many stocks from opening, volume totaled $2 billion, approximately 25 percent related to index arbitrage and portfolio insurance orders from the DOT system. One mutual fund sold blocks of stock totaling $500 million during this period.[97] Program sales by 10:00 a.m. represented 36 percent of total NYSE volume and over 61 percent of NYSE volume in S&P 500 stocks.[98]

Due to order imbalances, 95 stocks in the S&P 500—30 percent of the value of the index—had not opened by 10:00 a.m.[99] Thus, many stock prices in the index reflected stale values based on the close of trading on Friday, October 16.[100] Portfolio insurance sales in the futures market continued to push down the value of the S&P 500 contract.[101] At one point, there was an apparent 18 point discount of the S&P 500 future to the value of the index in the securities markets.[102] The record discount induced index arbitrage sales in the stock market constituting approximately 35 percent of the volume in S&P 500 stocks on the NYSE.[103] By 10:30 a.m., when most of the stocks on the NYSE had opened, the Dow was at 2,150, down almost 100 points from Friday's close.[104] It quickly fell another 100 points.

Index arbitrage purchases in the futures market erased the discount, and a premium emerged by 11:00 a.m. The Dow subsequently rallied up over 100 points.[105] The rally was shortly overcome by portfolio insurance sales in both the stock and futures markets. One portfolio insurance trader augmented sales in the futures markets with program selling in the stock market of 27.3 million shares, totaling just under $1.1 billion. These portfolio insurance trades were executed throughout the day in 13 "waves" of 2 million share sales orders of almost $100 million each. Between 11:40 a.m. and 2:00 p.m. the Dow lost nine percent of its value, dropping

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[95] SEC staff study at A-25, A-31.

[96] Brady Report at 30. The SEC staff study identified sales between 9:30 a.m. and 10:00 a.m. of 1,086 S&P 500 futures contracts related to portfolio insurance, accounting for 5.6 percent of total trading volume. SEC staff study at A-31.

[97] Brady Report at 30.

[98] SEC staff study at A-21.

[99] *Id.* at A-25.

[100] Brady Report at 30.

[101] Portfolio insurance selling of the S&P 500 contract was 13 percent of the volume between 10:00 a.m. and 10:30 and increased to 32 percent of the volume in the following half hour. SEC staff study at A-32.

[102] There was an apparent 10 point discount until 10:00 a.m. SEC staff study at A-31. The discount widened to as much as 18 points and was reduced to 12 points by 10:30 a.m. SEC staff study at A-32.

[103] During various intervals between 10:00 a.m. and 10:30 a.m. index arbitrage sales on the NYSE ranged from 37 percent to 33 percent of volume in NYSE stocks. SEC staff study at A-32.

[104] Brady Report at 30.

[105] SEC staff study at A-25, Brady Report at 30.

to 1950, while the S&P 500 future declined 14.5 percent. During little more than two hours of trading, portfolio insurers sold approximately 10,000 stock index futures contracts (equal to approximately $1.3 billion in stock) representing 41 percent of the volume exclusive of marketmakers.[106] At the same time, portfolio insurers sold shares totaling approximately $900 million on the NYSE.

By mid-afternoon index arbitrage began to abate as the DOT system was overloaded, causing delays in executing these programs. However, portfolio insurance trading in both the securities and futures markets continued. In the futures markets, sales of 6,000 contracts approximating $660 million of stock were sold in the late afternoon, causing a discount of up to 20 points to develop.[107] In the 30 minutes before the NYSE closed, portfolio insurance sales totaled 3 million shares. Another 4.3 million shares were sold as the result of other program trading activities.[108] The Dow plunged 252 points in just over one hour before closing at 1738.

When the markets closed, the Dow had dropped 508 points (22.6 percent) on volume of 608 million shares and the S&P 500 future had plummeted almost 81 points (28.6 percent) to close at 201.5. All told, portfolio insurance, index arbitrage and other program selling on the NYSE represented almost 15 percent of total NYSE volume. Program trades accounted for more than one out of every five trades in S&P 500 stocks on the NYSE.[109] Portfolio insurance sales of the S&P 500 future totaled 16.7 percent of all sales in the future market.

Volume and volatility.—Although U.S. markets had experienced episodes of increased volatility before the October 1987 market crash, both the futures and stock markets were a veritable roller coaster on Tuesday, October 20th. Extreme stress on market mechanisms resulted in trading halts in stocks and futures. Automated order routing systems were overwhelmed, resulting in the voluntary termination of index arbitrage programs through this system. Portfolio insurance selling in the futures markets was heavy, causing record discounts to emerge. Due to the virtual elimination of stock index arbitrage, trading activity in the futures and stock markets were disconnected.

In contrast to the previous day, at the open of the NYSE on October 20th there were trading imbalances caused by strong buying orders. In the first hour of trading the Dow rose more than 11 percent to 1936.[110] The S&P 500 future also opened more than 10 percent higher, shortly thereafter increasing to 17 percent erasing the discount. However, the rally in the futures market was short-lived, due to heavy portfolio insurance sales as the value of the S&P 500 future dropped 27 percent of its value.[111] As portfolio insurance trading increased to as much as 39 percent of trading volume, a

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[106] Brady Report at 34. The SEC found that at certain intervals between 1:10 p.m. and 2:00 p.m. when the Dow was falling, index arbitrage and portfolio insurance programs combined accounted for more than 60 percent of the volume of trading on the NYSE. SEC staff study at 3-12.

[107] Brady Report at 36.

[108] SEC staff study at A-35.

[109] *Id.* at 3-12.

[110] Brady Report at 36 and III-22. SEC staff study at A-37.

[111] Brady Report at II-22.

record 46 point discount emerged between the S&P 500 future and the S&P 500 stock index value.[112]

Although index arbitrage was no longer a factor, the record discount in the future market fueled sales in the stock market in anticipation of further declines.[113] By mid-morning the Dow began a steep descent, plunging 227 points and losing 12 percent of its value in less than two hours.[114] By 12:30 p.m., the extraordinary sales pressures strained market-making capacity and large order imbalances caused trading halts in 145 NYSE stocks.[115] Stocks representing almost 25 percent of value of the S&P 500 were not trading. Trading halts in the stock comprising indexes resulted in temporary trading halts in the corresponding futures. With the futures trading halted, the Dow rallied up 124 points, gaining 7 percent in less than 50 minutes.[116]

Trading in the S&P 500 future reopened shortly after 1:00 p.m. with a 17 point discount, and portfolio insurance sales resumed. In the next 30 minutes the Dow dropped 80 points and the discount in the future market widened to over 31 points.[117] Apparently sparked by announcements of corporate buyback programs, broad based purchasing in the next two hours drove the Dow up 170 points; a gain of almost 10 percent in value.[118] During the last 35 minutes of trading, however, the Dow turned around, falling 80 points to close at 1841. For the day, the Dow gained a record 102 points on record volume of 614 million shares.[119]

Clearance and settlement systems.—The complexity and fragmentation of the separate clearing mechanisms in stock, futures, and options—in conjunction with massive volume, violent price violatility, and staggering demands on bank credit—brought the financial system to the brink of collapse on Tuesday, October 20th.[120] The unusually high number of stock transactions and problems with stock exchange trading systems caused a significant increase in the number of uncompared trades. It also caused processing delays at broker-dealers that clear transactions for themselves and other brokerage firms. As a result, stock positions could not be accurately determined by market participants before the start of the next day's trading.

The number and size of the payment obligations arising out of the dramatic increase in market activity also put the financial payments system under inordinate pressure. Rumors were rampant concerning the viability of clearinghouses and other market participants. This was especially true in the futures and options markets. For example, on October 19 alone, margin settlements relating to options transactions through the Options Clearing Corporation (OCC)[121] were $1.2 billion, and initial and variation margin

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[112] SEC staff study at A-40 to A-41.
[113] Brady Report at III-26.
[114] *Id.* at 37, III-26. SEC staff study at A-37.
[115] SEC staff study at A-37.
[116] Brady Report at III-26.
[117] SEC staff study at A-38.
[118] Brady Report at III-26.
[119] Brady Report at III-26.
[120] Brady Report at 64.
[121] The OCC is the principal clearing organization for exchange traded options. OCC issues, clears and settles all standardized options traded on securities exchanges or quoted on NASDAQ facilities, and is owned by its participating exchanges and the NASD.

payments relating to the futures markets to or through the Chicago Mercantile Exchange (CME) totaled $2.5 billion.[122] CME clearinghouse members that were the subject of the margin calls were required to pay in cash or cash equivalents during the day. However, according to clearinghouse rules, "winners" could not receive funds until the next day.[123] Similarly, the OCC did not pay out excess margin funds on an intraday basis. Most of the margin payments intended to cover option losses actually could have been offset by futures profits.

The size of these payment requirements, which were exacerbated by the absence of any ability to offset hedged options and futures positions, resulted in significant payment delays by two major futures clearinghouse members and an emergency capital infusion by an options clearinghouse member. Because of delays in the CME clearing process, two NYSE clearing organizations that are major clearing members were owed $1.5 billion and received their funds several hours later than usual. First Options, the largest options clearing firm, required an immediate loan from its parent company (Continental Illinois National Bank and Trust Company) to enable it to meet margin calls at OCC. OCC also was required to liquidate H.B. Shaine & Co., an OCC clearing member, because of its inability to meet OCC margin calls.

Because clearinghouse members are generally required to meet margin calls before compensating deposits are received from either customers or the clearinghouse, they are required to rely on commercial bank credit lines to satisfy their heavy liquidity demands. However, banks were understandably nervous about the continued viability of their clients given the possiblity of losses in other activities such as risk arbitrage, block trading or foreign exchange trading. Bankers were also concerned that the clearinghouses would be unable to collect on all their margin calls and would be unable to pay the full balances owed to members. As a result, some banks withdrew the uncommitted lines of credit common in the industry and placed restrictions on new loans to market participants.

The uncertainty about the availability of credit resulted in a general crisis of confidence and raised the specter of a full-scale financial system breakdown. On the morning of the 20th, the Federal Reserve assured the market that it would provide necessary liquidity to help prevent further catastrophe.[124] Although the extraordinary cash, credit, and timing demands placed on the clearance and settlement system did not actually result in any clearinghouse default, the mere possibility of such an event further contributed to market volatility. Some market makers limited market making activities, particularly in the case of block trades where capital commitments were required, because they were concerned about the continued availability of credit lines from their commercial bankers. In addition, general uncertainty in the marketplace undoubted-

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[122] Brady Report at 51-52. SEC staff study at 10-42. In contrast, margin payments at the CME on an average day are $100 million and OCC's average daily margin payments are $470 million. GAO Report to Congress "Clearance and Settlement: The Stock, Options, and Futures Market Are Still At Risk" (April 1990) at 40 (cited as GAO Clearance and Settlement Report).

[123] Brady Report at 51-52.

[124] Brady Report at 52.

ly contributed to investor anxiety and the absence of value investors during the market decline.

STUDIES OF THE MARKET CRASH OF 1987

Perhaps no economic event in modern times has been analyzed and scrutinized more than the October 1987 market crash. Reports written by market regulators, special committees and others provide a comprehensive and detailed record of the activities that surround the market crash. These reports enhance public understanding of how the markets function and the economic, psychological and structural factors that influence their behavior. Perhaps most important, these reports contain valuable recommendations on how best to improve the efficieny, safety, and supervision of the nation's markets.

One market

Perhaps the single most significant conclusion, common to all the reports, was the recognition that ostensibly different markets trading economically equivalent products operate, in fact, as a single market.[125] The Brady Report expressed this by stating:

> Analysis of the market behavior during the crucial days in mid-October makes clear an important conclusion. From an economic viewpoint, what have been traditionally seen as separate markets—the markets for stocks, stock index futures, and stock options—are in fact one market. Under ordinary circumstances these marketplaces move sympathetically, linked by a number of forces.
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> The instruments—stocks, stock index futures and stock options—are fundamentally driven by the same economic forces. The same major investment banks dominate the trading among the segments. In addition, many of the same institutions are responsible for a large amount of the trading in all three instruments and particularly in stocks and index futures.
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> Many . . . trading strategies . . . also serve to link these markets. Index arbitrage provides a direct linkage between the stock and index futures markets. Faced with increasingly chaotic markets in October, portfolio insurers, to the extent possible, abandoned their reliance on the futures markets to execute their strategies and switched to selling stocks directly, underlining the commonality among market function. Another link is the routine use of the future markets by institutions investing in index funds as a fast and low-cost entry and exit vehicle to the stock market. And, of course, a host of hedging strategies for individual stock positions employ counterbalancing purchases and sales by market makers in these marketplaces.
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[125] Brady Report at 55-57; SEC staff study at 3-1 to 3-9; Final CFTC staff study at 138

> Clearing procedures in the several market segments produce further intertwining. . . [P]roceeds from the sale in one market may provide funds needed to pay for purchases in another. Fears that a clearinghouse in one market segment might be unable to deliver funds owed to investor can ignite concern throughout the system, as it did in October. In sum, what may appear superficially to be three separate markets—for stocks, stock options and stock index futures—in fact behaves as one market.[126]

Factors affecting the market

While these reports make clear that common participants, instruments, trading strategies and mechanisms cause the stock, options and futures markets to behave as one market, they also demonstrate the important economic, psychological and structural factors that influence the behavior of that market.

Economic factors.—It is common to refer to the exchanges and organized associations which provide the infrastructure to facilitate the distribution and transfer of securities as the "market". However, the events of October 1987 demonstrate that the "market" is in actuality comprised of the millions of investors and traders who use these facilities to engage in transactions that reflect their assessments of the value of securities. The October market crash was a reflection of the cumulative actions of those who purchased and sold securities in the markets during that period. The studies make clear that the economic environment, which changed investor perceptions of securities values, played a key role in the collapse of stock prices during the October market crash.

The overwhelming consensus of the studies and witnesses who have testified before the Committee is that the securities markets were overvalued in October 1987, and a decline in market values was inevitable.[127] As one study stated: "An explanation of October 19 can be deceptively simple: A downturn [in the market] was expected, and when something that somehow fitted that description began to surface, everyone headed for the exits." [128]

In the months preceding the market crash there were growing concerns in the securities markets over rising interest rates, the declining value of the dollar, persistent budget and trade deficits and fears of inflation or a looming recession.[129] During the week before Black Monday, these concerns were fueled by several events, which acted to "trigger" a change in investor perceptions of investment fundamentals causing a revaluation of securities.[130] Three events are commonly cited as the shots that caused the avalanche of falling prices that started on October 14, 1987.

On Wednesday, October 14, 1987, the U.S. government announced that the trade deficit for August was $15.7 billion.[131] The

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[126] Brady Report at 55.

[127] *Id.* at I-11 to I-14; SEC staff study at 3-9 to 3-11; GAO Financial Markets Report at 41-42; NYSE Report at 19; Greenspan Testimony (February 2, 1988), S. Hrg. 100-649 at 93-94.

[128] NYSE Report at 19.

[129] Brady Report at I-11 to I-14; SEC staff study at 3-9 to 3-11; GAO Financial Markets Report at 41-42; NYSE Report at 19.

[130] *See* Brady Report at 15-16, I-11 to I-14; SEC staff study at 3-9 to 3-10; NYSE Report at 19-21; GAO Financial Markets Report at 39-40; CRS Market Report 8-10.

[131] Brady Report at 15, I-14; NYSE Report at 19.

trade deficit was $1.5 billion higher than expected, causing a decline in the value of the dollar. There was concern that a falling dollar, in turn, would create upward pressures on interest rates in order to attract and maintain foreign investment in U.S. debt securities needed to fund the U.S. budget deficits.

That day, the securities markets also were confronted with news that the German government had raised interest rates portending even higher rates in the U.S.[132] Concerns over rising interst rates were confirmed when yields on long-term U.S. Treasury bonds broke through the 10 percent level for the first time since 1985.[133] Although the Dow was trading at around 2500, based on these higher interest rate levels the Brady Commission estimated that the theoretical value of the Dow was closer to 2200.[134]

On October 14, news also reached the stock markets that the House Ways and Means Committee had marked-up legislation that would eliminate certain tax benefits associated with financing corporate takeovers.[135] Takeover stocks had led prices up during the bull market as investors contemplated potential takeover premiums and the break-up values of companies. The threatened end to takeover activity caused a revaluation of takeover stocks that based on more traditional standards would imply a significant drop in the Dow.

On the other hand, the significance of these specific events may be due to their proximity to the market crash. As the Federal Reserve Board Chairman told the Committee:

> Stock prices finally reached levels which stretched to incredulity expectations of rising real earnings and falling discount factors. Something had to snap. If it didn't happen in October, it would have happened soon thereafter.[136]

Psychological factors.—Just as economic factors affect investor perceptions of market values, psychological factors influence investor behaviors. Fear, uncertainty and illusions all played important roles in the events surrounding the October 1987 market crash.

The illusion of unlimited liquidity in the markets has been cited as a principle cause of both the overvaluation of securities leading up to the crash as well as the collapse of market prices during the crash. Institutional investors may have held on to securities longer than fundamental economic valuations would have justified in the belief that they could exit the market at the first sign of a downturn.[137] However, as the Brady Commission observed:

> Liquidity sufficient to absorb the selling demands of a limited number of investors becomes an illusion of liquidity when confronted by massive selling, as everyone shows up on the same side of the market at once. As with people

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[132] Brady Report at I-14.
[133] Brady Report at 15, I-13; NYSE Report at 19.
[134] Brady Report at I-13.
[135] Brady Report at 15-17, I-13; SEC staff study at 3-10; GAO Financial Markets Report at 41.
[136] Greenspan Testimony, (February 2, 1988), S. Hrg. 100-649 at 86.
[137] Brady Report at I-4; GAO Financial Markets Report at 38; Greenspan Testimony (February 2, 1988), S. Hrg. 100-649 at 94.

in a theatre when someone yells "Fire!", these sellers all ran for the exit in October, but it was large enough to accommodate only a few.

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The illusion of liquidity in the futures, options and stock markets contrasts with the reality of the overall equity market's liquidity—the finite capacity of this single, inextricably fused system of markets to absorb major selling or buying demands. Ironically, it was this illusion of liquidity which led some similarly motivated investors, such as portfolio insurers to adopt strategies which call for liquidity far in excess of what the market could supply.[138]

Rapid changes in market prices inducing fear and uncertainty can also affect investor behavior. A sudden surge of selling pressure prompting an abrupt fall in prices can create uncertainty, which causes others to exit the market exacerbating downward price movements.[139] At the same time, plunging prices may raise doubts about the underlying value of securities and discourage investors from entering the market.[140] Similarly, as was evident during the market crash, huge discounts in the derivative markets acted as a "billboard" making stocks appear overpriced and signaling further selling pressure, which also discouraged buyers from entering the market.[141]

Doubts about the markets' capacity to accommodate all orders may cause traders to rush to sell and get out before liquidity is exhausted.[142] During the October 1987 market crash, portfolio insurers who ordinarily relied on sales of futures executed selling programs in the stock market as well in an all-out effort to reduce equity portfolios.[143] Uncertainty was also fueled by rumors of a potential market close, causing some investors to sell before trading was halted.[144]

Finally, rumors casting doubt on the financial integrity of market participants and clearance and settlement systems inhibited buyers from entering the market.[145] These concerns also may have caused financial institutions to withdraw essential credit to key market participants.[146]

Structural factors.—By all accounts, on October 19th and 20th U.S. market mechanisms were simply overwhelmed by unprecedented selling pressure. In addition, the mechanisms that under ordinary circumstances link the markets became disconnected. Accordingly, structural factors played a significant role during the October market crash.[147] As the Brady Commission explained:

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[138] Brady Report at 57.
[139] Greenspan Testimony, (February 2, 1988), S. Hrg. 100-649 at 95.
[140] *Id.* at 95.
[141] Brady Report at 56-57; SEC staff study at 3-13; Greenspan Testimony, S. Hrg. 100-649 at 95.
[142] Greenspan Testimony, S. Hrg. 100-649 at 95.
[143] Brady Report at 56.
[144] Greenspan Testimony, (February 2, 1988), S. Hrg. 100-649 at 96.
[145] Brady Report at 56.
[146] *Id.* at 56.
[147] Brady Report at 56

> Just as the failure of sellers to understand that they were trading in a single equity market exacerbated the market break, so, too, did the breakdown in certain structural mechanisms linking these separate market segments. Unopened stocks inhibited trading in the derivative instruments. The [Chicago Mercantile Exchange's] temporary closing, and the difficulties the [Chicago Board Options Exchange] had in opening options trading, interfered with intermarket transactions. Transaction delays through the NYSE's DOT system and the subsequent decision to prohibit proprietary trading through the system, also disconnected the market segments.[148]

In sum, weaknesses in the mechanisms that caused the markets to disengage contributed to a near "freefall" of prices in both the stock and futures markets during the October market crash.

Recommendations of the market studies

The recognition that the stock, options and futures markets behave as one spurred a critical examination of the weaknesses in the structural and regulatory linkages among those markets. As stated by the Brady Commission:

> The failure of these market segments to perform as one market contributed to the violence of the market break in October 1987, which brought the financial system near to a breakdown. . . . This failure is amenable to reform. To prevent future damage this inextricably interrelated system of markets needs to work smoothly and in harmony. The growth of intermarket trading activities is a phenomenon of the 1980's. The October 1987 experience illustrates that regulatory changes, derived from the one-market concept, are necessary both to reduce the possibility of destructive market breaks and to deal effectively with such episodes should they occur. The guiding objective should be to enhance the integity and competitiveness of U.S. financial markets.[149]

The Brady Report and a number of other reports recommended reforms to strengthen the individual operations of the stock, options and futures markets, as well as the intermarket system. While the reports were not uniform in their recommendations, virtually every report urged that certain regulatory and legislative changes, as well as private market systems enhancements, were necessary to address the continued threat to the nation's financial system.

Need for improvements in intramarket mechanisms.—A number of recommendations focused on the need to improve market mechanisms that had been overwhelmed by extraordinary volume and volatility during the October 1987 crash. These included, among other proposals, expanding the capacity of automated routing systems for orders to the NYSE [150] and other markets and increasing

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[148] *Id.* at 56.

[149] Brady Report at 59.

[150] Testimony of David S. Ruder, Chairman, Securities and Exchange Commission, before the Committee on Banking, Housing and Urban Affairs (February 3, 1988) S. Hrg. 100-649 at 146; NYSE Report at 29.

specialists' capital.[151] These recommendations have been addressed in large part through a series of actions by the SROs and the SEC.[152]

Need for intermarket coordination of circuit breakers and other regulatory actions during periods of market stress.—Additional recommendations focused on the need for coordinated "circuit breakers" during periods of extraordinary volume and volatility, in order to give markets and market participants an opportunity to pause to assess their financial condition, disseminate order imbalance and price information, and take action based upon more complete information.[153] In 1988, the SROs, together with the SEC and CFTC, began to discuss the implementation of circuit breakers. In October 1988, the major exchanges and markets reached agreement on a system of coordinated circuit breakers during periods of market volatility.[154] The agreement provided for brief trading halts and price limits when either the S&P 500 futures or the Dow moved beyond a certain price range within a fixed period of time.

Consensus on the need for certain new statutory authority for the SEC.—Further recommendations, by the SEC, focused on the need for additional statutory authority to give the agency the tools it needed to take action during market emergencies, to obtain information about large traders in the market,[155] to assess the financial condition of broker-dealers and the risks to those broker-dealers, and to work with the CFTC and others to coordinate clearance and settlement systems for stocks, options and futures.[156] A broad consensus developed on the need for legislation in these areas, which led, ultimately, to the adoption of S. 648 by the Committee. A detailed discussion of specific provisons of S. 648 and the scope of the provisions is contained under "Purpose and Scope of the Legislation," *infra.*

Continuing discussion of issues relating to jurisdiction and margin.—During the period immediately following the October 1987 market crash and continuing today, certain key recommendations of the Brady Commission and other reports continue to be the subject of examination and debate among market regulators, Con-

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[151] Ruder Testimony at 147; Brady Report at 50; GAO Financial Markets Report at 55-58; SEC staff study at 4-6.

[152] For example, the NYSE has expanded the capacity of its DOT system and interrelated trading systems to efficiently accommodate trading of 600 million shares a day. Similarly, the NASD has corrected problems encountered with its Small Order Execution System during the crash and has developed an Order Confirmation Transaction Service, through which firms can negotiate, execute and confirm trades. Both the NYSE and AMEX have increased specialist capital requirements and facilitated the acquisition of specialist firms by more highly capitalized firms. The Options Clearing Corporation also has increased capital requirements for members.

[153] Brady Report at 66; Greenspan Testimony (February 3, 1988) S. Hrg. 100-649 at 97-98.

[154] *See* Securities Exchange Act Release No. 26198 (October 19, 1988) and Securities Exchange Act Release No. 27370 (October 23, 1989).

[155] Brady Report at 67; Ruder Testimony, S. Hrg. 100-649 at 155.

[156] *See* Brady Report at 64; Greenspan Testimony (February 3) S. Hrg. 100-649 at 155; Ruder Testimony (February 3) S. Hrg. 100-649 at 172; Testimony of Wendy L. Gramm, Chairman, Commodity Futures Trading Commission before the Committee on Banking, Housing and Urban Affairs, (March 31, 1988) S. Hrg. 100-686 at 87. A number of improvements in the area of clearance and settlement have been undertaken by the private markets without legislative action, working with the SEC and CFTC. For example, the OCC and CME have a cross-margining program, under which they exchange position data for participating members, independently calculate initial margin obligations in their options and futures positions and coordinate collection of initial margin on these positions. *See* Securities Exchange Act Release No. 27296 (September 26, 1989.) Nonetheless, the Department of the Treasury, the SEC, the CFTC and the Federal Reserve Board continue to urge improvements in this area.

gress and the private markets. A major recommendation addressed the need for one agency to "coordinate a few but critical intermarket regulatory issues, monitor intermarket activities and mediate intermarket concerns." [157] The Brady Commission recommended that, while the SEC should continue to regulate securities and the CFTC should continue to regulate futures, the Federal Reserve Board should be given responsibility for intermarket activities. The SEC proposed, instead, that the SEC should be given the authority to resolve interagency disagreements, or, as an alternative, should be given jurisdiction over both stocks and stock index futures.[158] The CFTC took a different position, endorsing the formation of a coordinating group composed of the SEC, CFTC and Federal Reserve Board.[159]

In order to develop a means to address intermarket regulatory issues, President Reagan on March 18, 1988 established by Executive Order the Working Group on Financial Markets ("Working Group"). The Working Group was chaired by the Under Secretary for Finance of the Treasury Department and included the chairmen of the SEC, CFTC and the Federal Reserve Board. The Working Group was established to:

> Provide a coordinating framework for consideration, resolution, recommendation, and action on the complex issues raised by the market break in October of 1987. The Working Group was charged with developing effective mechanisms to enhance investor confidence, to protect the quality and fairness of markets for all participants, and to preserve the continued orderliness, integrity, competitiveness, and efficiency of our nation's financial markets.[160]

Notwithstanding alternative proposals to address the necessity of intermarket coordination,[161] the Working Group expressed its belief that "cooperative efforts under the existing regulatory structure will be more effective and less disruptive than a more formal, additional legislated structure." [162]

With respect to margin requirements, the Brady Commission recommended that, because stocks, options and futures are economically one market, "margins need to be rationalized across markets." [163] Although it concluded that margins on both securities and futures had been sufficient to ensure the performance of traders, the Brady Commission argued that futures margins, which were comparatively lower than margin levels for stocks, could affect the degree of speculative activity and the risks to the finan-

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[157] Brady Report at 59.

[158] Ruder Testimony (February 3, 1988) S. Hrg. 100-649 at 139, 157.

[159] Testimony of Kalo A. Hineman, Acting Chairman, Commodity Futures Trading Commission, before the Committee on Banking, Housing and Urban Affairs (February 3, 1988), S. Hrg. 100-191 at 191.

[160] *See* "Interim Report of the Working Group on Financial Markets" (May 1988) (cited as Working Group Interim Report), reprinted in S. Hrg. 100-787 (May 24, 1988).

[161] On March 31, 1988, Senator Proxmire and other cosponsors introduced S. 2256, the "Intermarket Coordination Act of 1988," which closely tracked the recommendations of the Brady Report.

[162] Working Group Interim Report at 3.

[163] Brady Report at 64.

cial system as a whole.[164] The Brady Commission concluded that, while margins on futures and stocks should reflect the different structure of the two related market segments, "similar margins resulting in roughly equivalent risk and leverage between the two market segments are necessary to enforce consistent intermarket public policy objectives concerning leverage and speculation.[165] Because futures margins are not subject to federal regulation, the Brady Commission recommended that margin setting authority be given to the Federal Reserve Board, which currently has authority to establish margin levels for stocks and options.

While the SEC recommended that stock index futures margins be raised temporarily,[166] the CFTC, as well as the futures exchanges, took strong exception to the Brady Commission's recommendation to alter margins as a means of addressing leverage and speculation.[167] Futures exchange officials explained that margins for stocks and margins for futures serve fundamentally different purposes.[168] Moreover, the CFTC and others noted that studies of the October 1987 crash did not support the notion that speculative activity in the futures markets was responsible for the extraordinary plunge in prices.[169] They also argued that raising margins would reduce liquidity in the markets.

The question of the appropriate levels of margin, as well as the allocation of regulatory authority to establish margin levels, also was discussed by the President's Working Group on Financial Markets. In its interim Report in May 1988, the Working Group found that minimum margin levels at that time provided an adequate level of protection for the financial system, although they did not cover all possible price movements. The Working Group also found that differences in payment periods and price variability permitted lower levels for margins on stock index futures than for stock. While SEC Chairman Ruder expressed his view that margin levels should be raised to control volatility, the other members of the Working Group did not share that view.

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[164] The Brady Report noted that "margin requirements, through leverage, affect the volume of speculative investment activity." Brady Report at 65. The report argued that controlling speculative activity is one way to inhibit stock prices from becoming overvalued. In addition, higher margins can also guard against a rapid and steep decline in market prices, exacerbated by involuntary selling when speculators with highly leveraged positions are required suddenly to meet large margin calls. The Report explained "The equity action achievable with low margin investment in futures has the potential to increase intermarket leverage for market participants. The resulting financial risk may affect their ability to meet obligations in other market segments." *Id.*

[165] *Id.*

[166] Ruder Testimony (February 3, 1988) S. Hrg. 100-649 at 149-150; Ruder Testimony (March 31, 1988), S. Hrg. 100-686 at 52-53; and Ruder Testimony (May 24, 1988) S. Hrg. 100-787 at 49-51.

[167] Hineman Testimony (February 3, 1988), S. Hrg. 100-649 at 204-206; Testimony of Leo Melamed, Chairman Executive Committee, Chicago Mercantile Exchange, before the Committee on Banking, Housing and Urban Affairs (February 4, 1988), S. Hrg. 100-649 at 261-63; Testimony of Karsten Mahlmann, Chairman, Chicago Board of Trade, before the Committee on Banking, Housing and Urban Affairs (February 4, 1988), S. Hrg. 100-649 at 348-52.

[168] "Stock margins limit the extension of credit to purchase an asset. A futures contract is not an asset—it has no value when purchased. It is therefore not logically possible to discuss futures margin in the context of credit extension. Instead, futures margins are good faith deposits for contract performance. . . . In contrast to securities markets, futures markets maintain a virtual 'no debt' financial system." Melamed Testimony (February 4, 1988), S. Hrg. 100-649 at 262.

[169] Hineman Testimony (February 3, 1988), S. Hrg. 100-649 at 204-206. The CFTC and futures exchanges also cited a 1984 Federal Reserve Board study that found that margin levels did not affect stock price volatility. *See* "A Review and Evaluation of Federal Margin Regulations," Staff Study of the Board of Governors of the Federal Reserve (December 1984.)

The Market Disturbance of October 1989

While significant improvements have been made since October 1987, the market turbulence that occurred on October 13 and 16, 1989 suggested continuing structural problems in the markets, and in the system of federal market oversight.

On Friday, October 13, 1989, the Dow closed down more than 190 points, or 6.9 percent, for the day. This was the second largest one-day point decline, and the 12th largest daily percentage drop, the Dow's history. Other stock market indexes also fell substantially that day. Volume was extremely heavy during this decline. During the last hour of trading on the NYSE, 112 million shares were traded, or about 44 percent of the almost 256 million shares traded on the Exchange that day. This compares with the highest hourly volume on October 19, 1987 of 116.6 million shares.

Commentators attributed the decline in large part to the fact that at 2:43 p.m., a trading halt was announced in the stock of UAL Corporation, followed by the subsequent announcement at 2:55 p.m. that the financing for a leveraged buy-out of UAL was in doubt. This was viewed by many as an indication that continued financing of large buyouts, which had been a major source of market gains, was in doubt.

As a result of subsequent trading activity on the NYSE and in the futures markets, several of the protective measures introduced since October 1987 were triggered. First, when the Dow fell 25 points below Thursday's closing price at 11:44 a.m., the Individual Investor Express Delivery Service on the NYSE was activated. Under this procedure, public customer orders are routed to the specialist's post ahead of other orders.

Subsequent price movements triggered several "circuit breakers." The CME's automatic 12-point price limit for the S&P 500 December futures contract (equivalent to 91 points on the NYSE) was reached at 3:07 p.m. At 3:08, also triggered by the 12-point decline in the S&P 500 futures, the NYSE implemented its sidecar procedures.[170]

At 3:30 p.m., the CME lifted the 12-point price limit, and December S&P 500 contract then fell 18 points over the next 15 minutes. At 3:45 p.m., the December S&P 500 contract hit the CME's 30-point price limit circuit breaker, which remained in effect for the remainder of the day.[171]

On Monday, October 16, 1989, volume was again extraordinarily heavy. Over 143 million shares were traded in the first hour, and over 227 million shares traded over the first two hours. The S&P 500 December futures fell five points at the open, triggering the CME's opening price limit, but it immediately rebounded without triggering a trading halt. The DOW fell over 63 points in the first

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[170] Under the NYSE's sidecar procedures", after a 12-point decline in the S&P 500 futures, NYSE segregates program trade orders for S&P 500 stocks in a separate computer file, and then after five minutes, provides an aggregate total to the specialist.

[171] Program trading, including index arbitrage, was significant during this time. Over the last hour of trading, program sales accounted for 18.6 million shares or 16.6 percent of the 112 million shares traded on the NYSE, and 25 percent of the 74.3 million shares of S&P 500 stocks traded on the NYSE during that time. index arbitrage and related strategies accounted for 10.6 million shares or 9.4 percent of total NYSE volume and 14.2 percent of NYSE S&P 500 volume during this time.

40 minutes of trading, but the market then rallied sharply, closing the day 88 points (3.4 percent) above the close on Friday, October 13. Total NYSE volume for the 16th was 421.5 million shares, the fourth highest volume day in NYSE history.

There were important differences between October 1987 and October 1989 in the market's response to sharp price movements and heavy trading volume. Because of system enhancements, the markets were able to handle the extremely large volumes without significant operational problems. Emergency communications systems, which had been established between the stock and futures markets, the SEC, and CFTC, following the October 1987 crash, permitted continuous communications regarding significant market developments. Circuit breaker procedures were implemented without operational difficulty and may have had an ameliorating effect on the market's decline.[172]

In addition, there were no significant capital problems among the major securities firms, and specialists maintained strong capital positions. Cross-margining facilities approved since October 1987 were in use during this time and reduced margin payments by the two major firms participating in the pilot program operated by the OCC and the CME by $164 million, thus increasing their ability to provide liquidity to the markets without increasing clearing system risk.[173]

The October 1989 experience showed that the reforms that have been implemented over the past two years have made market systems more resilient. However, Federal officials with responsibility over these markets have urged that there are critical areas remaining for legislatory and private sector reform.

In the aftermath of the October 1989 market events, Treasury Secretary Brady provided his assessment of those events in testimony before the Committee on October 26, 1989. Secretary Brady emphasized that the "market's fall and rise in October 13 and 16 underscored the continuing potential for volatility." [174] While noting progress in implementing reforms following the October 1987 market crash, he urged Congressional adoption of the measures contained in the Market Reform Act, with certain modifications. In his testimony, Secretary Brady stated that important intermarket regulatory issues, such as inconsistent margins and coordinated clearance and settlement remained to be resolved. He expressed his intention to raise these issues within the Working Group. The Committee is continuing to review issues not addressed by the legislation.

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[172] Some concerns have been expressed over the fact that the circuit breakers on the CME and the NYSE did not go into effect simultaneously and were not consistent in certain other respects.

[173] Special measures were needed, however, to assure the continued operation and liquidity of two options clearing firms.

[174] Testimony of Nicholas F. Brady, Secretary, U.S. Department of the Treasury, before the Committee on Banking, Housing and Urban Affairs. (October 26, 1989), S. Hrg. 101-475 at 213.

THE MARKET REFORM ACT OF 1990—PURPOSE AND SCOPE OF THE LEGISLATION

REGULATORY RESPONSIVENESS TO A MARKET EMERGENCY (SECTION 2)

Background.—To the market professional and the casual observer alike, it is clear that today's securities markets are subject to sudden price movements and surges in trading volume. Institutional investors with huge stock portfolios, aided by modern communciations and new technology, can transmit an enormous volume of orders into the markets in an instant, placing severe pressures on prices and strains on market mechanisms. As a result, those responsible for the supervision and regulation of the markets must be able to respond with a speed that keeps pace with the markets' movements.

The need for the SEC to act rapidly to address a broad range of issues that can develop in a market emergency was amply demonstrated during the October 1987 market crash. The SEC was required to take a host of actions to facilitate the operations of the markets, ensure the financial integrity of market professionals, and modify regulations to reflect the extraordinary activities in the market.[175]

The back-to-back days of record trading volume on the NYSE on October 19 and 20, 1987, placed extraordinary stress on the operations of the Exchange's automated order routing system. When the NYSE's Designated Order Turnaround system was overloading, the SEC supported the Exchange's action on October 20th to preclude member firms from using the system to transmit stock index arbitrage orders.[176] This emergency action was taken to avert long delays and to facilitate the ability of public investors to transmit their orders to the market. Once the immediate crisis had passed, the SEC agreed with the NYSE to close the market early on October 23 through November 6, to enable the Exchange to process and resolve the record number of unmatched trades that resulted from the unprecedented volume on the previous days.[177] Reducing the trading hours for this limited period was essential to enable the exchange to successfully reconcile the uncompared trades that had doubled in the days surrounding the market crash.

The SEC also took actions to expedite and ease the acquisitions of financially distressted firms, including specialists units. The SEC accelerated its approval of NYSE rules governing the acquisitions of specialists by certain retail broker-dealer firms. Similarly, the SEC acted quickly to approve clearing corporation rules designed to enhance the liquidity of options market making clearing firms which had experienced financial difficulty during the crash.[178]

In addition, the SEC acted to modify regulations to take into account the extraordinary events that made compliance with existing rules impossible. For example, when securities markets closed early in the aftermath of the crash, the SEC permitted mutual

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[175] Testimony of David Ruder, SEC Chairman, before the Committee on Banking, Housing and Urban Affairs, (November 4, 1987), S. Hrg. 100-536 at 48, 54-56. *See* GAO Financial Markets Report at 89-90.

[176] Ruder Testimony at 54-55.

[177] *Id.* at 55.

[178] *Id.* at 55.

funds to adjust the time set to establish net asset values to coincide with the change in trading hours. In addition, mutual funds that owned securities traded on the Hong Kong Stock Exchange were permitted to suspend redemptions for 48 hours due to the inability to price shares when the Hong Kong markets closed for a week.[179]

Congress recognized the imortance of ensuring that regulators can respond rapidly to changes in market conditions when it granted emergency authority to the CFTC at the time of its establishment in 1974. Congress authorized the CFTC:

> to direct a contract market whenever it has reason to believe that an emergency exists, to take such action as, in the Commission's judgement, is necessary to maintain or restore orderly trading in, or liquidation of, any futures contract.[180]

This broad statutory authority empowers the CFTC to halt trading in one or more futures contracts or to resume trading if the Commission determines it is appropriate to do so. To provide latitude to the agency, an "emergency" is defined to include any "market disturbance which prevents the market from accurately reflecting the forces of supply and demand for [a] commodity." [181]

In contrast to the express statutory authority granted to the CFTC, the SEC's emergency authority, provided 40 years earlier than the CFTC's, is limited.[182] Many of the actions taken by the SEC to meet the exigencies of the 1987 market crash constituted SEC approvals of rule changes initiated by the SROs. The SEC does not have specific statutory authority to order such actions on its own initiative on an emergency basis. The SEC does have specific statutory authority to suspend trading in any non-exempt security for up to 10 days and, with the approval of the President, halt trading in all non-exempt securities on all exchanges or in the over-the-counter market for a period up to 90 days, if the SEC finds that the public interest or the protection of investors so requires. Consequently, the only clear emergency authority given to the SEC is confined to the most drastic action—trading halts.

In hearings following the 1987 crash, the Chairman of the Chicago Board of Trade told the Committee:

> The CFTC currently has the authority to deal with all futures markets emergencies, including closing the markets and raising margin levels. To the extent the SEC does not have such authority over the securities markets, its lack of such emergency powers should be addressed.[183]

The Chairman of the Chicago Mercantile Exchange also supported giving the SEC emergency authority, testifying, "We think it appropriate that the SEC be granted powers equivalent to those that

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[179] *Id.* at 56.

[180] *See* Section 8a(9) of the Commodity Exchange Act, 7 U.S.C. § 8a(9).

[181] Section 8a(9) of the Commodity Exchange Act, 7 U.S.C. § 8a(9). Section 8a(9) also defined an emergency to include "in addition to threatened or actual market manipulation and corners, any act of the United States or foreign government affecting a commodity."

[182] *See* Section 12(k) of the Securities Exchange Act of 1934, 15 U.S.C. § 781.

[183] Testimony by Karsten Mahlmann, Chairman, Chicago Board of Trade, before the Committee on Banking, Housing and Urban Affairs, (February 4, 1988), S. Hrg. 100-649 at 333, 364.

the CFTC has long held." [184] Providing the SEC with explicit emergency authority was viewed by a number of witnesses before the Committee as "a cornerstone of necessary market reform," [185] that "should give individual investors added confidence" [186] and "based on the [NYSE's] experience during the week of October 19, 1987, . . . is appropriate." [187]

Emergency trading halts.—Section 2 of the legislation preserves the SEC's current authority under section 12(k) of the Securities Exchange Act of 1934 to summarily suspend trading in individual securities (other than exempted securities) for a period up to ten days.

Section 2 also modifies slightly the government's authority under current law to summarily halt trading in all securities. Under existing section 12(k) of the Exchange Act, the SEC may act to suspend all trading on any national securities exchange or otherwise (*i.e.*, in the over-the-counter market) in securities other than exempted securities only after first obtaining Presidential approval. Section 2 of the bill clarifies the respective roles of the SEC and the President in actions taken to halt trading in the securities markets. Under section 2, the SEC must first find that in its opinion a trading halt is required in the public interest and for the protection of investors. If the SEC makes that finding, it may order a trading halt. The order, however, may not take effect unless the SEC notifies the President of its decision and is advised that the President does not disapprove.

Much of the debate regarding S. 648 centered on the appropriateness of increased SEC authority to implement market-wide trading halts in the securities markets and, concomitantly, the appropriate role of the President with respect to such decisions. After the October 1987 market crash, the SEC sought authority from Congress comparable to that of the CFTC, *i.e.*, authority to close markets without the prior approval of the President.

Subsequent to the introduction of S. 648, SEC Chairman Breeden expressed concerns about the absence of a Presidential role in decisions to implement a market-wide trading halt, under the bill as introduced. He stressed the importance of maintaining a system of checks and balances. However, Treasury Secretary Brady, in a letter to the Committee, stated: "It is appropriate for the initial response to market emergencies to come from a regulatory with expertise and proximity to the markets." [188] In subsequent testimony, Secretary Brady noted that giving this emergency authority to the SEC could also reduce the psychological impact on the markets of a potential trading halt,[189] Secretary Brady reasoned that pro-

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[184] Testimony by Leo Melamed, Chairman, Chicago Mercantile Exchange, before the Committee on Banking, Housing and Urban Affairs, (May 18, 1989), at 7, S. Hrg. 101-475 at 85.

[185] Testimony of Jeffrey B. Lane, President and Chief Operating Officer, Shearson Lehman Hutton, Inc., before the Committee on Banking, Housing and Urban Affairs, (May 18, 1989), S. Hrg. 101-475 at 134.

[186] Testimony of Charles R. Schwab, Chairman, Charles Schwab & Co., Inc., before the Committee on Banking, Housing and Urban Affairs, (May 18, 1989), S. Hrg. 101-475 at 273.

[187] Testimony of John J. Phelan Jr., Chairman and Chief Executive Officer, New York Stock Exchange, before the Committee on Banking, Housing and Urban Affairs, (May 18, 1989), S. Hrg. 101-475 at 47.

[188] Letter of Nicholas F. Brady, (October 25, 1989), printed in S. Hrg. 101-475, at 230.

[189] Testimony by Nicholas F. Brady, Secretary of the Treasury, before the Committee on Banking, Housing and Urban Affairs, (October 26, 1989), S. Hrg. 100-475 at 245.

viding this authority solely to the President heightens the dramatic nature of a potential trading halt. He expressed his belief that an SEC decision to close the markets would be viewed as "less of an event" than a Presidential decision to halt trading. His testimony suggested that action by the SEC, as the expert agency for the securities markets, could be perceived as the act of a technician, while a Presidential decision to call a market-wide trading halt might be perceived by the marketplace as a harbinger of even more dire events.

S. 648, as amended by the Committee, strikes an intermediate position, which is supported by both the SEC and Treasury. It would require the SEC to notify the President of any decision to call a market-wide trading halt and to be advised that the President does not disapprove of such decision. This approach would clarify that the affirmative decision to take action should be made by the SEC as the expert agency in matters involving the securities markets. The bill would, however, retain the President's involvement in decisions to implement market-wide trading halts and also would preserve the President's current authority to override an SEC decision.

Notwithstanding the Committee's determination to clarify the SEC's authority to halt trading in the securities markets, the Committee expects the SEC will use great restraint in exercising this authority. In its 56-year history, the SEC has never used its authority to order a market-wide trading halt. The SEC recognizes that the ultimate authority to close markets has been granted to the agency in the hope that it will never have to be exercised. The Committee's clarification of this provision is intended to ensure that the decision to exercise this power is a shared decision, involving both the agency responsible for the welfare of the U.S. securities markets and the Chief Executive responsible for the welfare of the country. In addition, the Committee anticipates that the SEC would consult with other agencies responsible for U.S. financial markets prior to exercising its authority under this provision.

The Committee recognizes the importance of maintaining continuous trading markets. However, as observed during the events of the October 1987 market crash, overburdened market mechanisms, order imbalances and the absence of liquidity can trip markets' natural circuit breakers. Accordingly, the Committee endorses the view that pre-set coordinated circuit breakers that are known to market participants and controlled by the exchanges and the regulatory agencies are preferable to having stressed trading markets come suddenly and uncontrollably screeching to a halt.[190]

The implementation of effective and coordinated circuit breakers in both the futures and securities markets will substantially reduce the need for SEC action to suspend market operations. Coordinated circuit breakers were recommended by the Brady Commission and endorsed by the members of the Working Group, as well as the securities and futures exchanges. They act as pre-set temporary trading halts, providing a sufficient pause to enable investors, regula-

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[190] *See* Testimony of Alan Greenspan, Chairman, Board of Governors of the Federal Reserve, before the Committee on Banking, Housing and Urban Affairs, (March 31, 1988), S. Hrg. 100-686 at 93-94.

tors and market professionals to evaluate conditions and redress operational or financial problems. At the same time, all market participants know that the markets will shortly reopen to permit them to execute transactions as they deem appropriate. It is the Committee's intent that the SEC, in conjunction with the CFTC, will monitor the effects of recently implemented circuit breakers in the futures and securities markets, facilitate changes that may be necessary as the SROs gain experience with these initiatives, and act with minimal intervention in the marketplace.

Temporary action to respond to a market emergency.—The Committee believes it is essential that the SEC have the flexibility to act expeditiously to address and resolve problems that threaten the proper functioning of the markets or the integrity of the clearance and settlement systems for securities, but that do not rise to the level of requiring a trading halt. Section 2 of the legislation provides the SEC with new authority summarily to take actions in an emergency consistent with its regulatory responsibilities under the Exchange Act.

Under new section 12(k)(2) of the Exchange Act, the SEC would be authorized to take temporary actions in an emergency when the agency finds that such actions are necessary in the public interest and for the protection of investors to maintain or restore fair and orderly securities markets or to ensure prompt and accurate clearance and settlement transactions in securities. In using this new authority, the SEC could take temporary actions with respect to all matters or actions subject to regulation under the Exchange Act by an SRO as well as those presently under direct SEC jurisdiction.[191] Consistent with Presidential oversight of SEC decisions to implement market-wide trading halts, the bill also provides that the President may override emergency actions taken by the SEC. Using this authority, the President can specify the time at which the SEC action will cease to be effective (*e.g.*, at the end of the trading day).

Temporary emergency actions might include, but would not be limited to, the ability to alter, supplement, suspend or impose requirements or restrictions with respect to hours of trading, position limits, and clearance and settlement. The SEC could act either to relax or to impose more stringent requirements in an emergency situation. SEC emergency actions would be temporary in nature (no more than 10 business days duration), directed to specific problems in the marketplace, and would be in response to extraordinary situations in which there is a major market disturbance, such as the October 1987 market crash, or imminent danger of such a disturbance.

While the characterization of circumstances as an "emergency" would depend on the particular facts, the authority to take temporary emergency actions provided in S. 648 is not intended to be used to prevent or limit market downturns or fluctuations in securities prices generally, other than those that threaten fair and orderly markets. Similarly, the actions should be tailored to the spe-

[191] Of course, the use by the SEC of its emergency authority under new subsection 12(k)(2) would not preclude the SEC also from engaging in expedited rulemaking pursuant to the provisions of the Administrative Procedure Act (5 U.S.C. 553) in appropriate situations.

cifics of a particular market event. For example, some emergency measures would be necessary only for very short periods, perhaps hours or minutes. However, other matters, such as those relating to hours of business and clearance and settlement, might be put in place for longer periods in order to be effective.

Emergency actions ordered by the SEC under the bill would remain in effect for the time specified by the SEC, unless overridden by the President. The SEC would be authorized to extend the effectiveness of emergency actions, but in no event would any action taken in response to a particular emergency remain in effect for more than ten business days, including extensions. This limitation would not apply with respect to actions taken in response to any other emergency that might occur during the ten business day period.

In light of the expected need for a prompt SEC response in the event of an emergency situation, the Committee has determined that the SEC should not be required to make findings other than those specified in S. 648. In addition, the bill specifies that the SEC is expressly exempted from observing procedures prescribed by the Administrative Procedure Act or the requirements prescribed in section 19(c) of the Exchange Act for abrogating, adding to, or deleting from the rules of a self-regulatory organization. These express exemptions are intended to enable the SEC to take temporary emergency action without procedural delay.

The Committee has determined that the SEC should have authority to take temporary action in an emergency on an expedited basis, both to initiate measures that might be necesary with respect to an individual SRO and to initiate or coordinate complementary measures that would be taken on a market-wide basis. However, the Committee anticipates that, consistent with the SEC's current practice, the SROs will generally remain the primary decision-makers with respect to their markets in an emergency, in recognition of the SROs first-hand knowledge of the conditions in their markets and record of responsible action. The Committee expects that whenever possible, the SEC will consult fully with the SROs when seeking to implement any temporary emergency action and that the SEC will use this authority judiciously.

MONITORING MARKET ACTIVITY BY LARGE TRADERS (SECTION 3)

Background.—In the Wake of the October 1987 market crash, the Brady Commission recommended the development of a monitoring system sufficient to enable regulators to readily assess market conditions and detect potential problems before a market crisis evolves. The Brady Commission explained:

> The October experience illustates the need for a trading information system incorporating the trade, time of the trade and the name of the ultimate customer in every major market segment. This is critical to assess the nature and cause of a market crisis to determine who bought and sold. This information can be used to diagnose developing

problems as well as to uncover potentially damaging abuses.[192]

The lack of timely information concerning trading in the securities markets was evident to the Brady Commission and others who sought to reconstruct the activities of major market participants during the October 1987 market crash. Even with the cooperation of major market participants, it took 45 days for the SEC to accumulate the trading information needed to reconstruct the market activity surrounding the crash.[193]

The SEC currently lacks specific statutory authority to enable it to quickly gather information necessary to assess securities trading activity. In contrast, under the CFTC's existing statutory authority, the CFTC routinely collects larger trader reports for futures positions. Such reports are currently used to monitor market activities and have been extremely useful in coordinated regulatory oversight of the futures and securities markets. The usefulness of these reports in reconstructing futures market activity in October 1987 was acknowledged by the Brady Commission as well as by the SEC.[194] However, the SEC has had ongoing difficulties in obtaining large trader information essential for reconstruction of securities market activity as well as for other regulatory purposes.

The SEC's difficulty in obtaining specific, timely information stems, in part, from the character of trading data currently collected by the securities SROs. The "audit trails" currently maintained by the SROs combine information from last sale reporting systems and clearing records to provide a time-sequenced report of securities transactions. These audit trails identify, among other things, the clearing members and executing brokers on each side of a trade. However, the audit trails do not identify the broker's customer, *i.e.*, the institution or individual who is actually trading. Consequently, the SEC and the SROs cannot routinely identify major market participants by using the audit trails without also requesting customer information from broker-dealers.

Moreover, broker-dealer files currently are not structured to provide customer information for specific transactions in a timely manner. Most firms maintain aggregate, day-end account records for clearance and billing purposes in one system, while information concerning specific customer transactions, such as that found on order tickets, is maintained at various locations including branch offices and trading desks. This makes it difficult and time consuming to match customers with specific transactions identified on an audit trail during various intervals in the course of a volatile trading session. The difficulty of this task is further compounded because brokerage firm customer account numbers vary from firm to firm. As a result, there is no unique customer identifying number that would enable the SEC quickly to aggregate information con-

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[192] Brady Report at 67.

[193] Testimony by Nicholas F. Brady, Chairman, Presidential Task Force on Market Mechanisms, before the Committee on Banking, Housing and Urban Affairs, (February 2, 1988), S. Hrg. 100-649 at 50. Testimony of David S. Ruder, Chairman, Securities and Exchange Commission, before the Committee on Banking, Housing and Urban Affairs, (November 4, 1987), S. Hrg. 100-536 at 88.

[194] *See* Brady Report at 67. *See* also SEC staff study at 3-27.

cerning the same customer trading through a variety of broker-dealers.

Retrieval of customer trading information in connection with investigations of potential illegal market activity, such as insider trading, has been aided by the development of so-called "Electronic Blue Sheets." [195] This computer-based system, through which securities firms can respond to SEC requests for trading information, is useful in retrieving customer trading information for a limited number of securities over a few trading days. Because time-sequenced information is often not required, broker-dealers can use aggregate account clearing or billing records to respond to these requests. However, the Electronic Blue Sheet system was neither designed for, nor could it accommodate, requests for customer trading information in hundreds or thousands of securities in a time-sequenced or transaction-specific format necessary to reconstruct broad based market activity during periods of extreme volatility, such as the October 1987 market crash.

The inadequacy of the current information system to provide timely data for reconstruction of market activity was evident in the aftermath of the 190-point drop in the Dow on October 13, 1989. In its efforts to reconstruct and analyze trading activity by major market participants on and around that day, the SEC identified 132 specific securities that were actively traded on October 13 and 16, 1989.[196] Based on data from the securities market audit trails, the SEC identifed approximately 50 broker-dealers who actively traded those 132 securities.

Using the Electronic Blue Sheet system the SEC requested customer identification of large traders meeting certain minimum share or dollar thresholds for each trading day. The broker-dealers, however, could not sort their files in accordance with the SEC's large trader criteria without re-programming existing computer systems. Since re-programming would have caused substantial delays, as well as costs to the broker-dealers involved, *i.e.*, The SEC accepted unsorted information containing all of the broker-dealers trading in the 132 securities during these days.

The burden fell on the SEC manually to sort through the trading data printouts to identify large traders. Adding to the difficulty of the task was the lack of information in the printouts to segregate trading information among the activities of the broker-dealer's proprietary accounts, institutional traders and individual customers. Substantial SEC resources were expended in this manual review of trading information.

Moreover, once the SEC identified potential large traders, additional information was needed concerning the precise timing of the trades in order to determine which traders were significant participants during critical periods of the trading day when the markets were most volatile. Since the Electronic Blue Sheets do not contain time-sequenced trading data, the SEC was required to initiate another series of requests for information. However, time-sequenced

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[195] The term "blue sheet" refers to the color of the paper forms used by the SEC over many decades to request trading information from broker-dealers for use in surveillance and enforcement inquiries.

[196] Information concerning the SEC's efforts to reconstruct trading activity following the October 13, 1989 market drop was provided to the Committee by SEC staff.

information is not readily retrievable from broker-dealer files. Many broker-dealers must currently conduct a manual search of records to identify and collect this information. According to the SEC, the time-consuming nature of this manual search for information is illustrated by the fact that, for October 16 alone, the three largest firms transmitted data on 13,692; 6,622; and 3,266 trades.

More than six months after the market plunged on October 13, 1989, the SEC was still in the process of collecting and analyzing information relating to the market activity of large traders. In this market reconstruction process, the SEC has been required to use extensive staff resources in item-consuming manual analysis of unsorted data provided by broker-dealers because the existing Electronic Blue Sheet system is not currently programmed to retrieve large trader information or to record transaction times.

Two years after the October 1987 market crash, Treasury Secretary Brady reiterated his support for SEC authority to request large trader information. In a letter to the Committee, he observed:

> The October 13, [1989] decline underscores the importance of [large trader reporting]. . . . While the CFTC was able to reconstruct large futures trading almost immediately, the SEC was forced to collect data from member firms—a cumbersome process that impedes the agency's ability to do its job effectively.[197]

Large trader reporting.—In light of the recommendations of the Brady Commission and the SEC, as well as the weaknesses evident in existing market information systems for monitoring and reconstructing market activity, the Committee has determined to provide the SEC with specific authority to obtain information regarding large securities transactions. This new authority expands the SEC's existing authority under section 17(a) of the Exchange Act to require brokers and dealers to make, keep, and furnish records and grants the Commission new authority to require large traders to identify themselves and the accounts through which they trade.

Section 3 of S. 648 provides the SEC with specific authority to adopt recordkeeping and reporting rules that would be used in creating a large trader reporting system. The legislation requires "large traders" to provide certain information directly to the SEC and also requires registered broker-dealers to make and keep specific records relating to large trader transactions. Information and records generated by the broker-dealers would be immediately available to the SEC (or an SRO designated by the SEC) upon its request and could be used to reconstruct trading activities in periods of market stress, as well as for surveillance enforcement, and other appropriate regulatory purposes.

A number of questions have been raised by the securities industry and the securities SROs regarding the need for the SEC directly to obtain large trader reports on an ongoing basis. Among the concerns voiced by the industry were that such a system would be expensive to implement and that it could potentially expose a great deal of proprietary information. As an alternative approach, it was suggested that, instead of providing reports to the SEC on an ongo-

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[197] Letter of Nicholas Brady (October 25, 1990), printed in S. Hrg. 101-475 at 230.

ing basis, the SEC should use the existing surveillance system, and in particular, the "Electronic Blue Sheets" process, to obtain large trader information.

However, based on the SEC's recent difficulties in reconstructing trading for the October 1989 market events using the Electronic Blue Sheets, the Committee believes that the SEC needs the authority provided in S. 648 to develop an effective and efficient large trader reporting system and that existing systems are not capable of fulfilling this function. While the Electronic Blue Sheet system is extremely valuable, it is designed for use in more narrowly focused enforcement investigations that generally relate to trading in individual securities. It is not designed for use for the multiple inquiries that are essential for trading reconstruction purposes.

The Committee determined that the objectives of the legislation could be achieved through a system that would require broker-dealers to keep large trader information internally, to be supplied to the SEC upon its request. Under S. 648, as amended, broker-dealers would be required to segregate and maintain their records of large trader transactions in such a manner that they would be available to the SEC for immediate use in the form and manner specified by the SEC.

The SEC has advised the Committee that it intends to work closely with the industry to develop the most efficient and cost-effective means of retrieving these records in the context of a large trader reporting system. It is anticipated that each large trade will obtain a unique identifying number from the SEC.[198] That number would be provided by the large trader to its broker-dealer(s) and would be programmed into an internal record-keeping system of the broker-dealer(s). Using the large trader's identifying number, a registered broker-dealer would keep and segregate records regarding large trader transactions, including a series of transactions, at or over certain threshold levels to be determined by the SEC from time to time as the "reporting activity level". The number would be programmed into the broker-dealer's customer files in the normal course of business, as is the case with respect to the customer's tax reporting number. At the end of the day, the broker-dealer's back office would identify the large trader's transactions through use of the large trader identifier and segregate and keep records of those that meet the threshold levels set by the SEC.

S. 648 requires that the broker-dealer's records of large trader transactions be available for immediate reporting to the SEC (or an SRO designated by the SEC) on the morning following the day the transactions were effected (which would include Saturdays or holidays). The bill also specifies that the records would be transmitted in a format and manner to be specified by the SEC, including but not limited to machine-readable form. The Committee anticipates that a computer-to-computer system will be developed, giving the SEC immediate access to the large trader records kept by broker-dealers.

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[198] Tax identifying numbers cannot be used for this purpose because large traders often trade through a number of entities that have different tax identifiers. A single number is needed for aggregation of the large trader's transactions.

S. 648 would permit matching or aggregation of large trader accounts among different broker-dealers. At the time the large trader obtains an identifying number or opens a new account, it will also identify the accounts in or through which it effects transactions. The unique identifier will be used for each of the large trader's accounts, thereby permitting aggregation of large trader securities positions to occur at the SEC (or a designated SRO) through the "matching" of accounts with the same numbers. Aggregation of accounts will provide the SEC with a more complete picture of the securities positions of large traders that effect transactions through different accounts at more than one broker-dealer.

The SEC's authority to gather information directly from large traders and to require record-keeping and reporting by registered brokers and dealers would apply only to large transactions, or a series of transactions, in a "publicly-traded security." The term "publicly-traded security" is defined to mean any equity security, including an option on individual equity securities and an option on an index of equity securities, listed, or admitted to unlisted trading privileges, on a national securities exchange, or quoted in an automated inter-dealer quotation system. The definition would include trading in indexes or baskets of securities. If an equity security comes within the definition of a "publicly-traded", it would qualify as a "publicly-traded security" wherever it is traded.

The universe of potential "large traders" anticipated by the definition contained in S. 648 includes, but is not limited to, individuals, hedge funds, banks, broker-dealers, insurance companies, investment advisers, mutual funds, pension funds, and trust companies. Two or more persons acting as a partnership, limited partnership, syndicate or other group would be considered a "person" under the legislation, in addition to the definition of "person" contained in section 3(a)(9) of the Exchange Act. However, for purposes of comity and in view of the particularized functions of such entities, the legislation excludes central banks of foreign governments from the requirements of this new subsection.

S. 648 also provides the SEC with broad exemptive authority with respect to these record-keeping and reporting requirements. The SEC may choose to exempt any person, transaction, or classes of persons or transactions, either conditionally or upon specified terms and conditions or for stated periods of time. The Committee intends to give the SEC broad discretion in this area, consistent with the purposes of the Exchange Act.

With respect to concerns regarding disclosure of proprietary information, the Committee understands that firm customer information and other information regarding securities could reveal confidential trading strategies to competitors. Accordingly, the Committee has determined to provide in S. 648 an exemption from laws which might otherwise require the disclosure of such information to the general public, *e.g.*, the Freedom of Information Act (FOIA), 5 U.S.C. 552.[199] This provision does not, however, allow the SEC to

[199] The Chairman of the Federal Reserve Board expressed initial concern over the public disclosure of trading information. However, the Chairman informed the Committee that: "if such information were made available to the various regulatory agencies without the public disclo-

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refuse to comply with legitimate information requests from Congress and does not prevent the SEC from granting access to any other Federal department or agency requesting information for purposes within the scope of its jurisdiction. Similarly, S. 648 does not prevent the SEC from complying with orders by a court of the United States in any action commenced by the U.S. or the SEC.

Critics of S. 648 also have suggested that a large trader reporting system in the U.S. might place the U.S. markets at a competitive disadvantage to foreign markets and that investors would leave the U.S. markets for foreign markets. This does not appear to have been true for the U.S. futures markets, where reporting of large futures positions is currently required. Nonetheless, recognizing this concern, S. 648 requires the SEC, in adopting any rules under the large trader reporting provision, to take into account the relationship between U.S. and international securities markets. In addition, the Committee expects that the SEC, in adopting any direct reporting rules, would consider carefully the total impact of such rules on capital formation in the U.S.

S. 648 codifies a number of other cost-related considerations the SEC must take into account. Specifically, in exercising its authority under S. 648, the SEC shall consider existing reporting systems and the costs associated with maintaining information with respect to transactions effected by large traders and reporting such information to the SEC or the SROs. The Committee intends that the SEC will be sensitive to the need to set parameters for recordkeeping and reporting securities transactions and will attempt to minimize the economic burdens of record-keeping and reporting whenever possible.

Moreover, the SEC has indicated that it would consider carefully the costs and benefits of beneficial ownership reporting and that it will not impose requirements on broker-dealers to report beneficial ownership information that is not recorded in the normal course of business. For example, many brokerdealers currently maintain no beneficial ownership records of transactions of foreign persons that are carried out through banks, particularly foreign banks, which serve as the record holder of such securities. It is anticipated that such beneficial owners would not be assigned large trader identifiers.

The Committee is convinced that a specific statutory requirement for a large trader reporting system will greatly facilitate the SEC's efforts to obtain such information when it is critically required, both in periods of market stress and for market surveillance purposes. The Committee intends that the SEC work closely with the industry and the SROs to develop a cost-effective system for large trader reporting.

FINANCIAL RISK ASSESSMENT OF BROKER-DEALERS WITHIN HOLDING COMPANY SYSTEMS (SECTION 4)

Background.—The October 1987 market crash demonstrated that plunging stock prices and market turbulence can generate an envi-

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sure and exempt under the Freedom of Information Act, I believe that we would withdraw any objection that we have. Our concern is the privacy issue in publication." Greenspan Testimony, (February 2, 1988), S. Hrg. 100-649 at 102.

ronment of uncertainty that threatens the financial viability of major market participants and ultimately the nation's financial system as a whole. As explained to the Committee by the Chairman of the Federal Reserve Board:

> There can certainly be a national component underlying the heightened demand for liquidity and increased reluctance of private borrowers. A stock market crash can patently increase the credit risk involved in lending to certain borrowers, such as dealers holding large inventories of equity relative to their capital. . . . But there can be, and almost always is, an exaggerated market reaction as well, based on little hard evidence, that builds on itself and ultimately affects borrowers whose creditworthiness has not been materially impaired by the drop in equity values. This irrational component of the demand for liquidity may reflect concerns that the crisis could affect the financial system or the economy more generally, spreading beyond the individual participants directly involved. It also can be a strong reaction to heightened uncertainties, before firm information becomes available on which potential borrowers have been weakened and which ones are still sound.[200]

The Brady Commission report highlighted dramatic instances of the withdrawal of credit and unfounded rumors concerning the financial viability of broker-dealers, market makers and clearinghouses. The report stated:

> Because clearinghouse members are required to meet [margin] calls even before any compensating balances are received either from customers or clearinghouses, the clearing members were compelled to increase their reliance on intraday credit from their commercial bankers. However, the bankers in question were already concerned about potential losses that their clearing member customer might have suffered on other lines of activity, such as risk arbitrage, block trading or foreign exchange trading. . . . In this atmosphere of uncertainty, the more possibility that commercial banks might curtail lending to clearinghouse members was enough to raise questions and feed rumors about the viability of those firms and the clearinghouses.[201]

Uncertainty about the financial condition of broker-dealers was a principal concern of the SEC and the Federal Reserve Board during the market crash. The Chairman of the SEC reported that on October 14, 1987, the agency began canvassing the SROs to determine the financial condition of broker-dealers.[202] Similarly, the Federal Reserve Board "paid particular attention to the credit relationships between banks and securities dealers" and was "in contact with both banks and securities firms regarding liquidity and

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[200] Greenspan Testimony, (February 2, 1988), S. Hrg. 100-649 at 8-90.
[201] Brady Report at 52.
[202] Testimony of David S. Ruder, Chairman, SEC, before the Committee on Banking, Housing and Urban Affairs, (November 4, 1987), S. Hrg. 100-536 at 48, 54.

funding of brokers and dealers." [203] The Federal Reserve found that there was a substantial increase in bank lending to brokers and dealers during the market crisis, reflecting the difficulty that these firms were having in obtaining credit from other sources.[204]

Regulatory concerns about the financial condition of broker-dealers may arise at times other than periods of market turbulence. These concerns stem from a dramatic expansion of the scope of activities and structure of major securities firms during the past decade and the risks these new activities and structure may pose to regulated broker-dealers. In order to compete in growing domestic and international markets, many broker-dealers have affiliated themselves with other entities or have created holding company structures. According to the SEC, the largest 25 U.S. broker-dealers are part of holding company systems.[205] Many registered broker-dealers have moved potentially risky activities, such as interest rate swaps, bridge loans, and foreign currency transactions, out of the broker-dealer entity and into affiliates or other entities in the holding company structure that are not under the direct regulatory oversight of the SEC or other financial regulator. According to information provided to the Committee by the SEC in September 1989, certain unregulated affiliates of registered broker-dealers had $50 billion to $100 billion outstanding in interest rate swaps and $15 billion or more in foreign currency positions.[206] At that time, it was estimated that affiliates in the ten largest broker-dealer holding companies had an aggregate total of $6 to $8 billion of bridge loans outstanding.

Traditionally, the SEC's financial responsibility and customer protection rules have sought to insulate broker-dealers and their customers from financial failures arising out of the regulated broker-dealers' business. The present statutory scheme focuses solely on the registered broker-dealer; the assets and liabilities of related entities are not taken into account. For example, the net capital rule, Rule 15c3-1 under the Exchange Act, is designed to ensure that broker-dealers maintain sufficient liquid assets to satisfy promptly the claims of customers and other broker-dealers and to provide a cushion of liquid assets in excess of liabilities to cover potential market and credit risks.[207] While the net capital rule has worked well for many years, the development over the past decade of large, broker-dealer holding companies has raised concerns that focusing solely on the net capital of broker-dealers does not fully protect these firms and their customers from the adverse impact of financial failures of affiliated entities.

Moreover, excess capital in the broker-dealer could be misleading. It is not a sufficient measure of overall risk in a holding company system. Activities in other affiliates are generally more highly leveraged, and their activities are generally more risky by

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[203] Greenspan Testimony, (February 2, 1988), S. Hrg. 100-649 at 91.

[204] Greenspan Testimony, (February 2, 1988), S. Hrg. 100-649 at 105, 467-469.

[205] While most broker-dealers were essentially stand-alone firms as recently as 15 years ago, assets at the five largest broker-dealers for which comparable public data were available were only 69 percent of their holding companies' total in 1988.

[206] Letter David S. Ruder, Chairman, SEC (September 7, 1989) S. Hrg. 101-475 at 393.

[207] The practical effect of the net capital rule is discussed extensively in the testimony of SEC Chairman Richard C. Breeden on the Bankruptcy of Drexel Burnham Lambert Group Inc., before the Committee on Banking, Housing and Urban Affairs. (March 2, 1990).

nature. Through double leveraging, it is possible for a holding company's capital to be less than that in its broker-dealer. If the holding company has borrowed to make equity investments in the broker-dealer, the broker-dealer's strength may be illusory.[208]

Financial exposure could result directly from the withdrawal of capital from the broker-dealer firm to meet obligations of unregulated affiliates or indirectly from the impact on the broker-dealer's ability to finance its activities. The broker-dealer may be unable to rely on the holding company for capital infusions during times of crisis, and access to commercial paper funding through its parent may disappear. Similarly, banks may withdraw lines of credit or restrict lending arrangements with broker-dealers because of a deterioration of the financial health of affiliated entities. Broker-dealers enter into repurchase agreements to fund much of their short-term financing or investment needs. If the holding company encountered financial difficulties, a creditor (or contra party) might force the broker-dealer to provide additional securities as margin. A small increase in the required margin could force the broker-dealer to liquidate the transactions and seriously affect its short-term financing ability.

"Rumor contagion" can occur even through the broker-dealer is unaffected in a direct legal sense by the failure of an affiliate. The recent experiences in the securities markets have illustrated that even though a brokerage firm may have sufficient regulatory capital to meet customer liquidation needs, that capital level may not be sufficient to protect the firm against its proprietary market risks or those of its affiliates, particularly in a crisis situation. Accordingly, the ability of a U.S. broker-dealer to continue operations if a major affiliate ceased operations or encountered financial difficulties could be severely restricted.

As a result of the uncertainty about the financial condition of broker-dealers during the October 1987 market crisis, the SEC has requested authority to obtain information about certain broker-dealer holding company and affilitate activity. Following its study of the 1987 crash, the SEC concluded:

> Uncertainty concerning the total risk exposure of participants in the stock, options, and futures markets exacerbated conditions during the market break. Timely, accurate and complete assessment of that risk exposure on a routine basis is essential to safe markets. Information necessary to complete assessment of market participant risk exposure is not always available, however, because financial exposure to market participants can emanate from unregulated corporate affiliate conducting a variety of different securities or financial activities. For example, holding companies of some investment banking firms engage in bridge financing transactions. In these transactions, the holding company commits its own capital, often for acquisition-related or leverage buy-out transactions with investment banking clients of their subsidiary broker-dealer.

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[208] In 1988, the average ratio of equity to assets of the five largest holding companies for which comparable public data are available was only 3.65 percent, while at the broker dealer subsidiaries, it was 4.20 percent.

> Also, some broker dealers have large affiliates that deal actively in foreign currencies, mortgages, and interest rate swaps.[209]

The necessity of providing risk assessment information to regulators was also endorsed by the Secretary of the Treasury in the wake of the 190-point drop in the Dow on October 13, 1989. Secretary Brady stated:

> The October 13 experience again points out the need for this authority, particularly during turbulent market conditions. We and the financial regulators spent much of the weekend after October 13 trying to find informatin on bridge loans and other indicia of systemic risk. This information should have been available to regulators *before* it was needed. (emphasis in original) [210]

Finally, the events leading to the bankruptcy of Drexel Burnham Lambert Group Inc. ("Drexel") demonstrated that the financial health, and ultimately, the survival, of a regulated broker-dealer may be inextricably tied to the viability of its unregulated affiliates.[211] Drexel, which was the parent holding company of a registered broker-dealer and a government securities dealer, as well as numberous other affiliates, began experiencing financial problems in the fall of 1989. As a result of a weakening of the high-yield bond market and declining revenes during the fall of 1989, Drexel's commerical paper rating was lowered in December of 1989. Unsecured lenders began pulling back from financing Drexel. During the first weeks of January 1990, as Drexel's financial condition weakened, its outside financing sources dried up. During January, Drexel withdrew approximately $400 million of capital from its registered broker-dealer and its government securities affilitate, thereby reducing the capital cushion for each firm. Drexel made these transfers without notifying either the SEC or the NYSE.

The SEC became aware of the increased exposure to the broker-dealer when it was informed by the Federal Reserve Bank of New York that a government securities dealer had expressed substantial concern over the viability of Drexel's government securities affiliate, and, therefore, would not continue to trade with it. This report triggered a review by both the SEC and the New York Federal Reserve. On February 7th, the SEC and NYSE instructed Drexel not to further deplete the broker-dealer's capital without prior notice and approval of both the SEC and NYSE. On February 12, 1990, the NYSE, after consulting with the SEC, prohibited further withdrawals of capital. Drexel filed for bankruptcy February 13, 1990.

In testimony before the Committee, SEC Chairman Breeden said the problems at Drexel:

> . . . underscore the need for the Commission to have regular information regarding a broker-dealer's holding company and related corporate organizations. The Commission

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[209] Testimony of David S. Ruder, Chairman, SEC, before the Committee on Banking, Housing, and Urban Affairs, (March 31, 1988), S. Hrg. 100-686 at 51.

[210] Letter of Nicholas F. Brady, (October 25, 1989), S Hrg. 101-475, at 230.

[211] *See* Hearing on the Bankruptcy of Drexel Burnham Lambert Inc., before the Committee on Banking, Housing and Urban Affairs, (March 2, 1990).

did not have adequate information regarding the Drexel holding company and its unregulated affiliates. The absence of that information severely hindered the Commission in its monitoring of the regulated entities, especially our ability to know of the imminence of a liquidity crisis for the parent, and the corresponding risk that the broker-dealer's capital could have been depleted in a desperate but fruitless attempt to pay the parent firm's unsecured creditors.

We believe that in order for the Commission to better understand and anticipate problems in broker-dealers, we must have information on how broker-dealer holding companies and their related entities fund their operations, allocate their capital, and manage risks inherent in their businesses. Because this information is so critical to our ability to monitor broker-dealers, I urge the Senate to promptly pass the risk assessment legislation that the Commission has proposed. I do not believe that our system, and the tens of millions of public shareholders, should be exposed to sudden risk of loss due to hidden problems in a controlling and unregulated entity.[212]

Authority to require information relating to risks to broker-dealers in a holding company system.—S. 648 is intended to provide the SEC with information necessary to assess the overall financial exposure of broker-dealer holding company systems. The bill provides the SEC with specific authority to obtain information regarding certain activities of broker-dealer holding company affiliates that are reasonably likely to have a material impact on the financial and operational condition of broker-dealers under the SEC's jurisdiction. This information would assist the SEC in detecting situations in which the financial condition of a broker-dealer could be seriously impaired as a result of certain risks being taken by a controlling entity or other affiliate of the broker-dealer. S. 648 is designed to provide the SEC with "early warning" of such potential problems and thus would assist the SEC in its efforts to protect the stability of all broker-dealer participants in the marketplace, as well as the investing public.

The SEC already has broad authority with respect to matters relating to the financial responsibility of brokers and dealers pursuant to section 15(c)(3) of the Exchange Act. S. 648 would augment this authority by providing the SEC with certain information necessary to assess the aggregate financial condition of the overall organization of which the broker-dealer is a part. In addition, S. 648 builds on the SEC's existing statutory authority to require record-keeping and reporting requirements for brokers, dealers, and municipal securities dealers under section 17(a) of the Exchange Act, and to examine brokers, dealers, municipal securities dealers and government securities brokers and dealers for which it is the appropriate regulatory agency under sections 17(b) and 15C(d) of the Exchange Act.

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[212] Testimony of Richard C. Breeden, Chairman, SEC, before the Committee on Banking, Housing and Urban Affairs (March 2, 1990).

As originally introduced, S. 648 would have enabled the SEC to adopt rules requiring comprehensive reporting of risk assessment information directly to the SEC on an ongoing basis. However, in an effort to eliminate unnecessary costs to reporting firms, while achieving the objectives of the legislation, the risk assessment provision in S. 648 has been narrowed.

The approach taken in S. 648, as amended, requires a broker-dealer to obtain and maintain risk assessment information at the broker-dealer subject to examination by the SEC and SROs and to file periodic summary reports concerning risk assessment information. In addition, the SEC could require more detailed reports during periods of market stress or when information contained in the quarterly reports or other information available to the SEC leads the SEC to reasonably conclude that such action was necessary to assess the financial or operational condition of a broker-dealer. The Committee believes that this approach will provide the SEC with the necessary information to obtain a complete picture regarding the potential financial exposure of broker-dealers that are part of holding company systems, without imposing unnecessarily burdensome routine record-keeping and reporting requirements.

Specifically, S. 648, as amended, would require a registered broker-dealer (as well as a registered municipal securities dealer for which the SEC is the appropriate regulatory agency) to obtain information and make and keep records prescribed by the SEC concerning the broker-dealer's policies, procedures or systems for monitoring and controlling financial and operational risks to it resulting from the activities of its associated persons. Affiliated companies of a broker-dealer (including its parent and subsidiaries) would fall within the Exchange Act's definition of "associated person". The broker-dealer's records would describe in the aggregate each of the financial and securities activities conducted by, and the customary sources of capital and funding of, the broker-dealer's associated persons whose business activities are reasonably likely to have a material impact on the broker-dealer's financial or operational condition. Such information and records would be available to the SEC for routine inspection purposes under the SEC's existing authority.

The SEC would require the broker-dealer to provide summary reports of risk assessment information to the SEC, but not more frequently than quarterly. This periodic reporting would enable the SEC to have relatively recent risk assessment data on hand and in its files in the event of a market emergency.

In addition, where the SEC reasonably concluded that it had concerns regarding the financial or operational condition of a broker-dealer (or a municipal seucrities dealer, government securities broker or government securities dealer for which it is the appropriate regulatory agency), the SEC could require more detailed reports regarding the activities of such firm's associated persons. For example, during periods of market stress, the SEC might require registered persons to report the major inventory risk positions and trading strategies of their associated persons. Moreover, the SEC could request more detailed data when, based on information contained in the quarterly reports or other available information, the SEC reasonably concluded that it had concerns regarding the fi-

nancial or operating condition of a specific registered broker-dealer.

The Committee also has determined that it is appropriate to make conforming amendments to the Government Securities Act in order to provide the Treasury with similar rulemaking authority with respect to registered government securities brokers and dealers that are not also registered brokers or dealers or financial institutions. The Secretary of the Treasury and the appropriate regulatory agencies for registered government securities brokers and dealers and given authority to request information identical to that given the SEC under new subsection 17(h).

Some associated persons of government securities brokers and dealers under Treasury's rulemaking jurisdiction may also be associated persons of brokers and dealers reporting to the SEC pursuant to new subsection 17(h). In view of the Committee's concerns over potentially duplicative requirements concerning holding company systems that have both registered brokers and dealers and registered government securities brokers and dealers, S. 648 requires the Secretary of the Treasury to conform its record-keeping and reporting requirements, to the greatest extent practicable, to those of the SEC.

The record-keeping and reporting required pursuant to S. 648 is designed to provide the SEC with the information necessary for its risk assessment purposes. Information available to the SEC under this provision will relate solely to financial and securities activities of associated persons of broker-dealers, and it would not extend to non-financial and non-securities activities. The information submitted under this provision will relate only to those associated persons whose business activities are reasonably likely to have a material impact on the financial or operational condition of the broker-dealer. This bill would not require information regarding the activities of any associated person who is a natural person (or a personal trust for the sole benefit of natural persons).

The term "aggregate" used in describing the records to be kept by the broker-dealer is intended generally to describe the level of detail in the information that broker-dealers would have to obtain and maintain concerning their affiliated companies (including their parents). Generally, the SEC stated its expectation that broker-dealers will obtain information necessary to determine and report aggregate information regarding an associated person's financial and securities activities. For example, broker-dealers would obtain and maintain records of the total outstanding bridge loans made by their affiliated companies for reporting purposes, as well as sufficient information to determine whether any concentrations of such loans exist. In addition, information would be obtained regarding the aggregate financial exposure of a broker-dealer's affiliates to persons in financial or operational difficulty. The details and terms of specific transactions normally would not be reported separately, but included in aggregate data, except where any single transaction alone might be so large as to threaten materially the financial condition of the broker-dealer.

S. 648 would provide the SEC with broad exemptive authority, and it is anticipated that the SEC would seek to exempt from the record-keeping and reporting requirements broker-dealers whose

activities are *de minimis* in nature, so that such firms are not reasonably likely to pose a material threat to the national financial system or the clearance and settlement system. The SEC is also provided with exemptive authority to avoid the imposition of duplicative or otherwise unnecessary reporting obligations on regulated affiliates of broker-dealers. Consequently, the Committee expects that the SEC will provide exemptions which permit comparable risk assessment information that is filed with another financial regulator, such as the Federal Reserve Board or the CFTC, to be provided by the broker-dealer to the SEC without reformatting.

In granting other exemptions, the bill directs the SEC to consider a number of factors. These include the amount of assets and revenues involved in securities activities, the availability of information from another supervisory agency, and, with respect to international holding company systems, the amount or proportion of assets or revenues derived from U.S. securities activities.

In response to legitimate concerns of both the industry and the SEC regarding the disclosure of proprietary information, S. 648 provides the SEC with authority to maintain the confidentiality of information reported pursuant to subsection 17(h), as well as the confidentiality of any similar information supplied to the SEC by any domestic or foreign regulatory agency. However, this provision does not allow the SEC to refuse to comply with requests for such information from Congress and does not prevent the SEC from providing access to this information to any other Federal department or agency requesting information within the scope of its jurisdiction. Likewise, S. 648 does not prevent the SEC from complying with orders of U.S. courts in connection with an action commenced by the U.S. or the SEC.

The Committee believes that prudent business practice in a complex, fast-moving, internationalized securities markets dictates that broker-dealer firms engage in comprehensive internal risk assessment evaluations. In today's markets, it is essential that the SEC be alert to serious potential risks to broker-dealers in order to assess systemic risks to individual firms and the market as a whole. S. 648 would enable the SEC to have the necessary information to be aware of problems before they become severe, and to plan for any action that might be required. This will enable the SEC to take informed actions with respect to particular broker-dealers, and also instill confidence in the markets by alleviating uncertainty concerning the stability of major market participants.

COORDINATING AND STRENGTHENING SYSTEMS FOR CLEARANCE AND SETTLEMENT OF SECURITIES

Background.—Many of the studies of the market crash of 1987 identified weaknesses in clearance and settlement systems and the rerlated threat to the nation's payment system, as the principal risk associated with extreme market volatility and, in particular, with severe and rapid downward price movements.[213] As the Presi-

[213] "Clearance and settlement" refers to the procedures by which securities or futures instruments, and the funds to pay for purchases and sales of these instruments, change hands. Clearance is the process through which a third party (clearing organization) receives the terms of the

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dent of the New York Federal Reserve Bank, Gerald Corrigan, has noted, "the greatest threat to the stability of the financial system as a whole [during the market crash] was the danger of a major default in one of these clearing and settlement systems." [214] Numerous witnesses appearing before the Committee, including Federal Reserve Chairman Alan Greenspan and Treasury Secretary Nicholas Brady, have also expressed the view that strengthening the clearance and settlement systems is the single most important unresolved market reform. In his October 26, 1989 testimony before the Committee, Treasury Secretary Brady noted that clearance and settlement mechanisms are "the weakest link in the whole system." [215] He noted that improving clearance and settlement would "help ensure that a securities market failure does not become a credit market failure." More recently, the GAO issued a report noting that despite reforms implemented since the October 1987 market crash, clearance and settlement systems are "vulnerable to instability in the event of another large and sudden market adjustment." [216]

A number of problems in this area stem from certain differences in clearance and settlement systems for securities, options and futures, even though clearing organizations in the three markets perform the same basic set of functions, *i.e.* trade comparison, risk management, and settlement.[217] The 1975 amendments to the Exchange Act directed the SEC to "facilitate the establishment of a national system for the prompt and accurate clearance and settlement of transactions in securities." [218] The Congressional findings, included in section 17A of the Exchange act, stated, "The linking of all clearance and settlement facilities and the development of uniform standards and procedures for clearance and settlement will reduce unnecessary costs and increase the protection of investors . . ." While the provisions of the Exchange Act set forth a comprehensive scheme for regulation of clearing agencies, and the results to date show major improvements, there is a lack of coordination among futures, options and stock systems that raises continuing concerns in this area.

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transaction from both the buyer and seller and compares the information to determine whether the trade terms coincide. If the trade data from both the buyer and seller match, the clearing organization then "guarantees" the trade by promising to perform on the agreement, regardless of whether the buyer fails to provide sufficient payment or the seller fails to provide the securities. Settlement refers to the completion of the transaction. It is the stage of the process where the financial instrument and money are exchanged. The buyer and seller make payment of the purchase price and delivery of the instrument to the clearing organization, and the clearing organization in turn transfers funds to the seller and delivers the financial instrument to the buyer. For securities derivatives, settlement also includes the collection of margin payments. Within this basic framework, different clearance and settlement systems may vary considerably. At the most fundamental level, there is physical delivery of securities in exhange for payment. Most trading, however, occurs via a "book entry" system whereby financial instruments are maintained in a depository and transfer of ownership occurs electronically from one account to another.

[214] *See* Speech by E. Gerald Corrigan, President of the Federal Reserve Bank of New York, to the Federal Reserve Bank of Richmond Payment System Symposium, May 25, 1989, (cited as "Corrigan Speech").

[215] Brady Testimony, (October 26, 1989) S. Hrg. 101-495 at 225.

[216] GAO clearance and settlement Report at 3.

[217] *Id.* at 17. For example, as noted in the GAO report, stock trades settle in five business days after a transaction, while options and futures trades settle the next day. In addition, options and futures are uncertificated interests, while persons who own stock can request certificates of ownership.

[218] See section 17A(a)(2) of the Exchange Act, adopted as part of the 1975 amendments.

All stock transactions are cleared through three linked clearing organizations, with the National Securities Clearing Corp. accounting for 95 percent of stock transactions,[219] and clearing facilities for options traded on the five U.S. options exchanges and NASDAQ are centralized at the Options Clearing Corporation.[220] There are nine separate clearing organizations servicing fourteen futures exchanges. Because 80% of futures trading volume takes place in the two largest futures markets, futures clearing volume is heavily concentrated in the two clearinghouses associated with those markets.

The structural complexity of the clearance and settlement system is further complicated by the diverse number of participants in the system.[221] New York Federal Reserve Bank President Gerald Corrigan describes the structure as an inverted pyramid:

> At the top are the dealers and parties entering into financial transactions in the pits at the exchanges or over-the-counter. At the next lower level would be trade netting arrangements, such as the securities, options and futures clearing corporations. These trade netting systems then settle through other systems and the funds settlement for these systems, in turn, are made by clearinghouse checks, or through the Clearing House Interbank Payments System ("Chips"), and ultimately at the bottom of the pyramid through the [Federal Reserve's] Fed Wire.[222]

These complicated arrangements are critical to the functioning of securities markets. Investors must have confidence that their trades will be settled as anticipated, on a timely basis. Errors can be extremely costly to investors who, for example, think their positions are hedged, if the profit side of a matched trade is not completed. Delays can cause solvent participants severe liquidity problems if cash from some transactions is not received in time to make payments on others or to meet margin calls. Questions about the condition of major clearance and settlement participants may deter some investors from trading at all.

A consequence of the fragmentation in clearing and settlement systems is that no single clearing entity has a view of the net financial exposure of clearing members who participate in two or more markets simultaneously.[223] While an overall position may be relatively neutral in terms of profit or loss, a market participant might be required to immediately meet additional margin calls resulting from a loss in one market, even though he has offsetting profits in another. This segmented system affects banks as well, causing increased liquidity demands because of the inability of customers to use profits in one market as collateral for transactions in another. As the Brady Report noted:

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[219] GAO Clearance and Settlement Report at 11. Two regional exchanges have their own clearing organizations. *Id.*

[220] *Id.*

[221] GAO Clearance and Settlement Report at 10.

[222] Corrigan Speech. Chapter 10 of the SEC's report on the October 1987 Market Break provides a detailed description of the system for trade comparison, clearance and settlement.

[223] Twenty percent of clearinghouse member firms (193 firms) trade in more than one market. GAO Clearance and Settlement Report at 18.

> In the current system, margin flows are based on intra-market positions, and the timing of margin flows differs across houses. For the sort of intermarket transactions which are the mainstay of these markets, funds must be shuttled from clearinghouse to clearinghouse in the margin settlement process. This process creates imbalances in financing needs and increases demand for bank credit.[224]

In the wake of the difficulties encountered in October 1987, many clearing organizations took steps to enhance intermarket coordination of clearing and settlement.[225] These programs have the potential to increase market liquidity by decreasing the amount of cash necessary to cover initial margin requirements of common members who take intermarket positions.

However, Treasury Secretary Brady, SEC Chairman Breeden and other government officials, as well as private market participants, continue to recommend further improvements. They have urged that weaknesses in the structure of clearance and settlement systems threaten the continued effective functioning of the nation's payment systems. During periods of market instability, major mechanical breakdowns, liquidity problems, or defaults in one of these systems may occur suddenly and have the potential to seriously and adversely affect all other direct and indirect participants in the payments system, including commercial banks.[226] Given these concerns, the Brady Commission, the Working Group, the SEC, the GAO and others have recommended that clearing and settlement systems be strengthened to alleviate the stress on this weak link in the financial system.

Authority to facilitate linked or coordinated facilities for clearance and settlement.—Although steps have been taken to improve the clearance and settlement system since the 1987 market crash, the Committee believes that additional progress is necessary to minimize the risk to the nation's payment system during periods of extreme market volatility, and to lay the groundwork for the increasing volume of cross-border securities transactions. Intermarket coordination measures such as cross-margining should be expanded to include options market makers who clear their futures positions through an affiliate or an independent futures clearing firm. In addition, as the markets become increasingly internationalized, the importance of developing international clearance and

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[224] Brady Report at 64.

[225] The most significant changes involve intermarket margining and information sharing. For example, two pilot cross-margining programs have been implemented. One is the arrangement between the Options Clearing Corp. and the Chicago Mercantile Exchange. The other is being conducted by the Intermarket Clearing Corporation, a subsidiary of the OCC.

[226] Major banks may have large exposures in this process. Securities firms rely heavily on bank financing, obtaining anywhere from 30 to 75 percent of their funds from that source. Banks also provide emergency credit to firms short of cash on deposit to meet clearinghouse debts. Credit decisions must be made quickly and, at times, without collateral. Banks also provide backstop financing or standby letters of credit for commercial paper and permit securities firms to run large daylight overdrafts. If banks suddenly withdraw credit to a large firm, the loss of liquidity could halt that firm's operations. On the other hand, a bank that continues lending to a firm that cannot cover its loans as quickly as expected may itself face huge cash shortages because the amounts are potentially so large. A major default by a clearing participant could threaten the entire settlement mechanism, which, by leaving other participants short, could in an extreme case threaten the entire payments mechanism.

settlement standards, such as reduced stock settlement time periods, will be correspondingly heightened.[227] S. 648 provides clarification of the SEC's and CFTC's authority to expand their activities in this area, and would provide these agencies with the means to remove impediments to the establishment of a national clearance and settlement system, while maintaining the flexibility to respond to changes in the market environment.

The legislation authorizes the SEC and the CFTC to facilitate the establishment of linked or coordinated facilities for clearance and settlement of transactions in securities, securities options, contracts of sale for future delivery and options thereon, and commodity options. The legislation does not mandate any particular clearance or settlement system structure, but it leaves to the discretion of the SEC to promulgate rules having due regard for the public interest, the protection of investors, the safeguarding of securities and funds, and maintenance of fair competition.[228] The issues raised by clearance and settlement procedures cross regulatory boundaries, and the SEC is therefore directed to consult with the Commodity Futures Trading Commission and the Board of Governors of the Federal Reserve System.

Lack of uniform requirements for the transfer and pledge of securities.—The October 1987 market crash demonstrated that the lack of uniformity and clarity among state laws governing the transfer and pledge of securities also adversely affects liquidity in clearance and settlement systems. The disparity among various state laws can lead to uncertainties that make it difficult, if not impracticable, for investors to finance their payment obligations in one market by pledging the value of their positions in another market as collateral for loans. Although uniform procedures would directly enhance the safe and efficient operation of clearance and settlement systems, the nature of the process for achieving uniformity among the various state laws is cumbersome and time-consuming.[229] Moreover, state commercial laws in this area tend to be

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[127] In March 1989, a group of international experts on clearance and settlement published a report recommending that by 1992, settlement of stock transactions occur on the third day after the trade date. *See* Clearance and Settlement Systems in the World's Securities Markets, Group of Thirty (March 1989). The Group of Thirty also has observed that, in order to accomplish third day settlement of securities in the U.S., greater immobilization of securities certificates may be necessary.

[228] As introduced, S. 648 directed the SEC and CFTC, in consultation with the Board of Governors of the Federal Reserve System, to use their authority to facilitate and establishment of "linked, coordianted, or centralized" clearance and settlement facilities. The word "centralized" was deleted. No inference should be drawn that the Committee favors or opposes centralizing in one entity the clearance and settlement of all or any securities, options, and futures.

[229] Model rules governing the transfer and pledge of securities are codified in Article 8 of the Uniform Commercial Code (UCC). The UCC is promulgated by the National Conference of Commissioners on Uniform State Laws, which is comprised of Commissioners from each of the fifty states. Once the Commissioners determine that it is necessary to adopt a new amendment to or revise the UCC, it establishes a study committee to prepare a report on the proposed change. The Commissioners then review the study committee's report and, if they decide that the proposed amendment or revision should be adopted, a committee is established and charged with drafting the proposed change. After the draft is in final form, it must be approved by both the Commissioners and the American Law Institute. It then becomes part of the UCC. The National Conference then introduces the new amendment to the various state legislatures and encourages them to make it part of their state's law. However, because the states are not required to enact these revisions into law, different states have different rules governing the transfer and pledge of securities. The resulting lack of uniformity could have serious consequences for the national clearance and settlement system for securities.

highly technical, and proposed amendments to these laws may not receive the necessary priority or attention from state legislators.

One problem highlighted by the 1987 crash is the lack of uniformity in adopting Article 8 of the Uniform Commercial Code (UCC), which, in 1977, was significantly revised to accommodate the increased issuance of uncertified securities such as exchange-traded options.[230] Ten states still have not adopted the 1977 amendments to the UCC. In those states that have adopted the amendments, a number of different versions have been adopted. Moreover, in those states that adopted the amendments as originally drafted, actual practices in the securities industry differ. Consequently, for example, a lender who desires to perfect a security interest in options pledged as collateral must file a financing statement in some states but not others. Although this inconsistency does not preclude an investor from pledging options as collateral, it makes the financing process more burdensome for prospective lenders and may create enough uncertainly to cause a prospective lender to reconsider its decision to accept options as collateral for loans. This creates liquidity problems for investors who need to raise cash quickly by pledging the unrealized value of options positions to satisfy settlement obligations in other financial markets.

The lack of harmony among state laws governing the transfer and pledge of securities also raises liquidity concerns by restricting the ability of domestic clearing agencies to use foreign financial institutions and clearing agencies as custodians for their members' securities. As enacted in most states, Article 8 effectively precludes domestic clearing agencies from using foreign financial institutions as custodians. As a result, banks and broker-dealers acting for United States investors with positions in foreign securities must establish direct clearing and custodial relationships in the home jurisdiction of the issuer in order to complete transactions in these securities, even if both parties to the trade are U.S. nationals. This requires investors to establish a number of clearing and custodial relationships instead of consolidating their clearance and settlement activity at one domestic clearing agency. This denies the investor the opportunity to offset credit arising from transactions in domestic securities against debits resulting from transactions involving foreign securities for the purposes of determining the net settlement obligation. Thus, the fragmentation caused by the lack of uniform state laws precludes a single clearing agency from assessing the investor's total financial exposure. This detracts from the liquidity of the clearance and settlement system by requiring a greater volume of money and securities settlements than may otherwise be necessary.

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[230] The principal effect of the 1977 amendments to the UCC is to set forth rules for the transfer and pledge of uncertificated securities and to clarify that Article 8, as opposed to Article 9, controls the perfection of security interests in both certificated and uncertificated securities. The pre-1977 versions of Article 8 did not recognize uncertificated securities. Uncertificated securities were considered general intangibles under Article 9 and, therefore, perfection of a security interest was accomplished by filing a financing statement in the state where the debtor had its principal place of business. The amendments created a separate category of investment security under Article 8, where perfection of a security interest is effected by registration of a pledge on the books of the issuer or through transfer of a security interest on the books of a financial intermediary (*i.e.*, banks, clearing corporations, or other entities which regularly maintain security accounts for their customers).

Some steps have been taken since the October 1987 crash towards harmonizing the state laws governing the transfer and pledge of securities.[231] However, given the cumbersome procedures involved in achieving uniformity through state-by-state amendments to laws governing the transfer and pledge of securities in the various states, the SEC has requested from Congress authority to take necessary action to harmonize inconsistent state laws which would impede the effective functioning of the clearance and settlement process.

Authority to facilitate the transfer and pledge of securities.—S. 648 would establish a framework through the SEC would be able to promulgate rules applicable to the transfer and pledge of securities, notwithstanding state laws. The Committee believes that S. 648 will give the SEC the ability to provide greater certainty concerning the rights of leaders, borrowers and investors in securities. As a result, the clearance and settlement system will become more stable and efficient, thereby reducing the threat to the nation's financial system.

During the Committee's consideration of S. 648, concerns were raised about the appropriateness of providing a regulatory agency with the authority to override state law through rulemaking. Due to the critical importance of strengthening the clearance and settlement system, the Committee determined that it was appropriate to provide the SEC with limited authority in this area. The Committee believes that the authority granted to the SEC to preempt state law in S. 648 is carefully circumscribed so as to minimize the intrusive nature of the SEC actions. As Treasury Secretary Brady noted:

> [Treasury] did have concerns about this provision. However, changes were made to this section that largely addressed our concerns. First, two additional findings that constrain the exercise of SEC authority would be required for rulemaking. Second, the SEC, after consulting with Treasury and the Federal Reserve, would appoint a 15-member Advisory Committee to report to the SEC, and the SEC would have to give consideration to its recommendations. Third, the SEC would be specifically required to consult with and consider the views of the Secretary of the Treasury and the Federal Reserve. If the Secretary of the Treasury were to object, the Commission would have to consider all feasible alternatives and make explicit findings before adopting the rule.[232]

The Committee notes that, before adopting any rule or regulation which would have the effect of preempting state commercial law, the SEC would be required to make specific findings that (1)

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[231] In January 1989, at the request of the SEC, the American Bar Association Section on Corporate and Securities Law formed an Advisory Committee to study the need to harmonize state law governing the transfer and pledge of securities. The Advisory Committee includes representatives of the SEC, CFTC, OCC, CME, the Federal Reserve Bank of New York, the Treasury and state commercial law experts. The Committee has met several times in an effort to identify those areas in which the lack of uniform laws causes clearance and settlement problems and to develop solutions to these problems. The Advisory Committee has established subgroups to examine specific topics and is expected to prepare a draft interim report by June 1990.

[232] Letter of Nicholas F. Brady, (October 25, 1989), printed in S. Hrg. 101-475, at 230.

the rule is necessary and appropriate for the protection of investors or in the public interest, (2) that the safe and efficient clearance and settlement will be impeded absent a rule, and (3) that the benefits of the rule exceed the detriments. It should also be noted that, under existing section 25 of the Exchange Act, any state which is affected and which does not believe that SEC has met its burden of findings may challenge the SEC's action in federal court.

The authority granted in S. 648 is essentially an extension of previous Congressional policy in this area. In 1975 amendments to the Exchange Act regarding the establishment of a national clearance and settlement system, Congress in section 17A of the Exchange Act authorized the SEC to "facilitate the establishment of a national system for the prompt and accurate clearance and settlement of transactions in securities."

In addition, on a number of occasions in the past, Congress has determined to preempt state Uniform Commercial Code provisions in order to provide national standards in areas affecting interstate commerce.[233] Recognizing the need for federal standards to avoid contradictory state laws providing time periods for the availability of funds, the Expedited Funds Availability Act [234] provided that inconsistent state laws, "including the Uniform Commercial Code as in effect in [any] state," would be preempted.[235] The authority to override state Uniform Commercial Code provisions extended to rules of the Federal Reserve promulgated pursuant to the statute.[236] More recently, in adopting the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA), Congress authorized the Federal Deposit Insurance Corporation to act as a receiver and conservator of state chartered institutions, notwithstanding the law or Constitution of any State.[237] FIRREA also "preempts State law with respect to claims brought by the FDIC in any capacity against officers and directors of an insured depository institution." In determining that FIRREA should preempt State laws in these and other areas, Congress concluded that the gains in efficiency provided by a uniform Federal policy outweighted state concerns in these carefully defined, limited and technical areas.

Congress has also adopted measures preempting inconsistent state laws, but giving states the opportunity to revisit the issue. This formulation is particularly useful with respect to subjects that do not get a great deal of attention at the state level, where laws have not been modernized primarily because of a lack of interest. For example, the Secondary Mortgage Market Enhancement Act (SMMEA) [238] preempted certain state investment laws which otherwise would have limited investments in mortgaged-backed securities. However, SMMEA provided that the preemption would not apply where a state, within seven years, enacted a statute specifi-

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[233] *See*, The Federal Bills of Lading Act, 49 U.S.C.A. sec. 81 *et seq.* (1976); the National Consumer Credit Protection Act, 18 U.S.C.A. secs. 1601 *et seq.* (1976); the Magnuson-Moss-Warranty-Federal Trade Commission Improvement Act, 15 U.S.C.A. sec. 2301 *et seq.* (1979).

[234] Contained in Title V of the Competitive Equality Banking Act, Pub. L. 100-86.

[235] *Id.* Section 608(b).

[236] *See* Regulation CC, 12 C.F.R. 229 (1988).

[237] Pub. L. 101-73, 103 Stat. 183, sec. 212(a).

[238] Pub. L. No. 98-440, 98 Stat. 1689.

cally referring to the provisions of SMMEA and overriding the state preemption provisions.

Reports on progress toward establishing linked or coordinated facilities for clearance and settlement.—In addition to providing authority for the SEC to facilitate the establishment of linked or coordinated clearance and settlement systems, S. 648 also requires a report on the progress of such action. Under Section 6(a) of the legislation, the SEC and the CFTC, in consultation with the Federal Reserve, are directed to examine progress toward establishing linked or coordinated facilities for clearance and settlement of transactions in securities, securities options, contracts of sale for future delivery and options thereon, and commodity options. Not later than one year from the date of enactment of S. 648, the SEC and the CFTC are required to submit a report to Congress detailing and evaluating progress in establishing such linked or coordinated facilities.

NEED FOR GREATER INTERAGENCY AND INTERMARKET COORDINATON (SECTION 6)

The market breaks of October 1987 and October 1989 demonstrated the linkages of the U.S. stock, options and futures markets; the interrelationships of those markets to the national payments system; and the connections among the capital markets of the world. The regulatory responsibility for various segments of the financial system is divided among the SEC, CFTC, the Federal Reserve Board and the Treasury Department. Consequently, maintaining the efficiency and integrity of the U.S. financial markets as well as fostering greater harmony among world markets requires extensive interagency communication and coordination by these financial regulators.

The reports and studies of the October 1987 market crash also focused attention on the rapid and dramatic changes in our capital markets during the 1980's resulting from financial innovation, technological advances and global communications. These continuing developments present formidable challenges to our financial regulators. In fulfilling its oversight responsibility, the Committee has examined a number of these important developments.

On October 3, 1989, the Subcommittee on Securities held a hearing on the Role of Institutional Investors in Corporate Governance, Takeovers and the Capital Markets. At this hearing, witnesses stated that more than 60 percent of the 200 largest U.S. corporations in America have more than half their shares owned by institutional investors. This has led some to be concerned about the dominance of trading by institutional investors and the effects of this trading strategy on the markets and on individual investors.

The Committee has also examined market volatility. In October 1989, Secretary Brady noted that the events of October 1989 indicated that "extreme cases of market volatility continue to occur." There are a number of ongoing studies of the causes of market volatility and ways to maintain fair and orderly securities markets. The extent to which episodes of volatility have become more frequent than in the past and the cause and effect of volatility are matters of continued importance to the Committee.

Similarly, intermarket fraud and front-running was explored in hearings before the Committee. An important focus has been on the adequacy of information systems for market surveillance and enforcement needs, including effective methods for detecting and prohibiting intermarket trading abuses. Witnesses before the Committee have indicated that the exchange of information relating to financial institutions operating in multiple markets, whether domestic or international, may not be sufficient. Here the concern is two-fold. First, investors trading simultaneously in more than one market should have prompt and accurate information about events in the relevant markets. Second, the appropriate regulators should have sufficient information about events in all markets to understand the financial condition of major market participants, as well as to guard against intermarket trading abuses. Enhancements in this area are important to ensure the integrity of financial markets and to foster investor confidence.

Another important area examined by the Committee are issues relating to whether U.S. financial firms can be competitive in and gain fair access to foreign markets and to legislative proposals that, if enacted, would enhance our competitiveness. Witnesses before this Committee have frequently raised these issues in connection with the changes that European Community's 1992 Single Market initiative may bring. In a similar vein, when Secretary Brady testified before the Securities Subcommittee on October 26, 1989, Senator Graham stressed the importance of this country's development efforts in Latin America markets.

As the foregoing demonstrates, it is important that the appropriate regulatory agencies identify and address new and continuing developments, such as those discussed above, to ensure that our markets are prepared to meet the challenges of the future. It is equally important that Congress be kept apprised of the changes and issues that confront our markets.

Annual reports by market regulators.—To achieve this end, Section 6(b) of the Act requires the Secretary of the Treasury and the Chairmen of the Fedeal Reserve, the SEC and the CFTC to report to Congress not later than May 31, 1990 and annually thereafter until May 31, 1995 on important issues facing our markets and financial system. Specifically, section 6(b) requires the Secretary and the Chairmen to report on their efforts to coordinate regulatory activities and intermarket mechanisms to protect the payments and market systems during market emergencies. In addition, section 6(b) requires the Secretary and the Chairmen to report on the adequacy of margin levels and the use of leverage by market participants. Finally, the Act provides that the Secretary and the Chairman will report on their views with respect to such other issues and concerns relating to the soundness, stability, and integrity of domestic and international capital markets as may be appropriate.

The reporting provision in Section 6(b) of the Act is intended to provide an annual forum before the Committee to identify and examine critical developments that affect the future of U.S. capital markets (including those issues discussed earlier which have been the subject of Committee hearings) and to access the progress of those government entities responsible for financial market regulation in addressing those events and related policy issues. Such in-

formation will permit Congress to evaluate the challenges that U.S. securities markets and participants will be facing in the future. The Committee believes that continued coordination of regulatory efforts regarding market developments is crucial for this country to retain its preeminent position in the global securities markets.

The Committee recognizes that the financial market regulatory agencies, as the result of different responsibilities and expertise, may have different perspectives ad recommendations relating to the various developments and issues affecting the markets. In order to benefit from the potential diversity of views and opinions of the regulatory agencies subject to the reporting requirements, the Committee has not required the filing of a joint annual report. Under section 6(b) of the Act, the Secretary and the Chairman are permitted, though not required, to file separate reports.

Report on regulatory authority to detect and deter market manipulation and fraud through program trading

Since the market crash in October 1987, numerous commentators on the securities markets have contended that the use of program trading strategies have dramatically increased volatility in the markets and are a primary cause of market crashes. Although many of the studies conducted since the October 1987 market crash have examined this hypothesis, no conclusive evidence of the affect of such strategies has been developed, and there is broad disagreement over the affect of program trading strategies on the markets.

S. 648 does not contain a prohibition of program trading. Nonetheless, the Committee is concerned by reports that program trading may be used to manipulate the markets or engage in other fraudulent practices. In addition, concerns have been raised that program trading may involve other practices that may harm investors, even through those practices may not be deemed "manipulative" nor "fraudulent" under current law. For this reason, Section 6(c) of the Act requires the SEC to report to this Committee and the Committee on Energy and Commerce of the House of Representatives on whether it has sufficient statutory authority to prohibit practices in the purchase and sale of securities to protect against market manipulation and fraud through program trading. This could include any practices or activities that are inconsistent with the statutory mission of the SEC to protect shareholders and investors, even though those practices may not be deemed manipulative or fraudulent under current law. If it concludes that it lacks sufficient authority, the SEC shall include in its report recommendations for legislative action to confer such authority.

Section-by-Section Analysis

SECTION 1: SHORT TITLE

This section provides that the short title of the bill is the "Market Reform Act of 1990".

SECTION 2: EMERGENCY AUTHORITY; TRADING HALTS

This section of the bill reiterates the SEC's existing authority contained in section 12(k) of the Securities Exchange Act of 1934

("Exchange Act") summarily to suspend trading in individual securities. It modifies slightly the respective roles of the President and the SEC under section 12(k) with respect to the suspension of trading in all securities. It also provides the SEC with new authority to take other temporary actions in the event of an emergency.

The section references in the following analysis refer to section 12(k) of the Exchange Act, as amended by S. 648.

Section 12(k)(1)—Trading suspensions.—Section 12(k)(1)(A) preserves the SEC's present authority summarily to suspend trading in individual securities (other than exempted securities) for a period up to ten days. This section reenacts the SEC's existing authority in this area, clarifying that the SEC is authorized to take such action "by order."

Section 12(k)(1)(B) slightly alters the SEC's current authority with respect to the suspension of trading in all securities (other than exempted securities). Current law requires the SEC to obtain the President's prior approval in order to impose a market-wide trading halt. Section 12(k)(1)(B) provides that a market-wide trading halt would not take effect unless the SEC notified the President of its decision to suspend all trading and was advised that the President did not disapprove of such decision.

SEC actions to implement trading suspensions (both with respect to individual securities as well as relating to market-wide trading halts) must be by order. As under current law, the SEC's authority to suspend trading may be exercised upon a finding by the SEC that in its opinion "the public interest and the protection of investors so require."

Section 12(k)(2)—Emergency actions.—Section 12(k)(2) contains new authority that permits the SEC, by order, to take temporary action in the event of an emergency. The SEC's authority to take such action extends to all matters subject to regulation under the Exchange Act both by the SEC or an SRO. For example, this paragraph would authorize the SEC to alter, supplement, suspend, or impose requirements or restrictions with respect to hours of trading, position limits, and clearance and settlement. The SEC's authority cold be used to relax or to impose more stringent requirements in the event of an emergency.

The SEC would have authority to take temporary action under section 12(k)(2) in an "emergency," as that term is defined in section 12(k)(6). Before exercising this temporary authority, the SEC must find that its actions are necessary in the public interest and for the protection of investors (i) to maintain or restore fair and orderly securities markets (other than markets in exempted securities); or (ii) to ensure prompt and accurate clearance and settlement of transactions in securities (other than exempted securities).

Under section 12(k)(2)(B), emergency actions of the SEC would remain in effect for the time specified by the SEC, but in no event longer than ten business days, including extensions. This limitation does not apply to actions taken in response to any other emergency that might occur during the ten business day period.

The SEC would be able to take emergency action on a summary basis, without procedural delay. Subparagraph B expressly exempts the SEC, in exercising its emergency authority, from the agency rule-making requirements prescribed by the Administrative Proce-

dure Act and from the requirements prescribed by section 19(c) of the Exchange Act for abrogating, adding to, or deleting from, the rules of a self-regulatory organization.

Section 12(k)(3)—Presidential override.—This section expressly limits the SEC's authority to act to halt trading on any national securities exchange or otherwise as provided in section 12(k)(1)(B) and to take emergency action pursuant to section 12(k)(2). This section provides that the President may direct that any order or action taken by the SEC involving the suspension of trading under section 12(k)(1)(B) or other summary action under section 12(k)(2) shall cease to be effective.

Section 12(k)(4)—Compliance.—This section makes certain conforming changes to the prohibition on actions by brokers, dealers or exchange members contained in existing section 12(k). It provides that no member of a national securities exchange, broker, or dealer shall act in contravention of an effective SEC order entered under section 12(k), unless such order has been stayed, modified, or set aside by a court as provided in paragraph (5) or, upon the direction of the President, has ceased to be effective as provided in paragraph (3).

Section 12(k)(5)—Judicial Review.—This section provides that any order of the SEC issued pursuant to section 12(k) would be subject to judicial review in the United States Courts of Appeals only as provided in section 25(a) of the Exchange Act. Any such review would be based on an examination of all information before the SEC at the time such order was issued (subject to the assertion of any applicable privilege by the SEC). Thus, for example, the fact that the President later directed that the SEC's action should cease to be effective should not lessen the SEC's ability to demonstrate that it was well-founded when it was taken.

The reviewing court is prohibited from entering a stay, writ of mandamus or similar relief unless the court finds, after notice and hearing before a panel of the court, that the SEC's order was arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. Thus, a court reviewing an order of the SEC pursuant to section 12(k) would be permitted to act only after the SEC had an opportunity in a hearing to explain the basis for its order.

Section 12(k)(6)—Definition of "Emergency".—Section 12(k)(6) defines the term "emergency" to mean a major market disturbance characterized by, or constituting (A) a substantial threat of sudden and excessive fluctuations of securities prices generally that threaten fair and orderly markets, or (B) a substantial disruption of the safe or efficient operation of the national system for clearance and settlement of securities.

Situations such as the October 1987 market crash—where severe price movements were coupled with severe capacity problems in the securities markets and capital concerns regarding exchange specialists—would constitute an emergency. The definition of emergency also includes situations where there are very grave operational or solvency concerns regarding a major market participant that could threaten the safe or efficient operation of clearing and settlement systems. In appropriate circumstances, an earthquake or other natural disaster that cripples the operational condition of an exchange would constitute an emergency. The SEC has the re-

sponsibility for determining whether an emergency exists, based on its evaluation of the facts and circumstances.

SECTION 3: LARGE TRADER REPORTING

Section 3 of the bill adds a new subsection (h) to Section 13 of the Exchange Act. This new subsection is designed to assist the SEC in its surveillance of the U.S. securities markets, clarifying and expanding its broad authority to adopt record-keeping and reporting rules for the purpose of monitoring the impact on the securities markets of large transactions involving a substantial volume, large fair market value or exercise value of securities transactions. The SEC could use the information required by this new subsection to reconstruct trading activities in periods of market stress, and for surveillance, enforcement and other appropriate regulatory purposes.

Section 13(h) anticipates that the SEC will develop an information-gathering and reporting system for monitoring large securities transactions. A person (as defined under this section) effecting large securities transactions in publicly-traded securities at a threshold amount to be determined by the SEC would be a "large trader" and thus be required to provide information to the SEC identifying the trader and identifying all accounts used for effecting securities transactions.

Registered broker-dealers effecting transactions for such a "large trader", either directly or indirectly, are required under this new subsection to make and keep and segregate records regarding certain of the large trader's securities transactions that equal or exceed a reporting level to be determined by the SEC. The broker-dealer's records of such transactions will remain at the broker-dealer until called for by the SEC or an SRO designated by the SEC. When requested, however, the broker-dealer's records must be available to the SEC in the format and transmitted in the manner specified by the SEC (including machine readable form) on the morning of the day following the day the transactions are effected.

The section references in the following analysis refer to new section 13(h) of the Exchange Act.

Section 13(h)(1)—Large trader reporting.—Section 13(h)(1) requires each "large trader" (as that term is defined in paragraph (8)) to provide information to the SEC as prescribed by rule. The information provided would identify the large trader and identify the accounts through which the large trader effects securities transactions. It is anticipated that each "large trader" reporting under this section will obtain a unique identifying number. The large trader's reporting obligation is intended to be ongoing in nature with respect to identification of trading accounts.

Section 13(h)(2)—Broker-dealer transaction reporting.—Section 13(h)(2) creates recordkeeping and reporting obligations for registered brokers and dealers with respect to securities transactions of large traders. Registered broker-dealers effecting securities transactions for large traders, either directly or indirectly, are required under this new section to make and keep records of large trader transactions that equal or exceed a "reporting activity level" (as defined in paragraph (8)) to be set by the SEC from time to time.

Such records must be available to the SEC (or an SRO designated by the SEC) on the morning of the day following the day the transactions were effected (which would include Saturdays and holidays) and must be reported to the SEC upon request by the SEC (or a designated SRO).

Paragraph (2) alaso requires such records and reports to be in the format and transmitted in the manner prescribed by the SEC (including, but not limited to, machine readable form). It is anticipated that large traders will inform their brokers and dealers of their unique identifying number in the ordinary course of business. For example, a large trader would inform its broker-dealer of the identifying number when opening its account or when it began to act as part of a group that meets the definition of large trader. Brokers and dealers would use the large trader's unique identifying number in order to make records of, segregate, and report the large trader's transactions.

Section 13(h)(3)—Aggregation.—Section 13(h)(3) authorizes the SEC to prescribe rules governing the manner in which transactions and accounts of large traders will be aggregated. Large traders often trade through more than one account and through several firms. Accordingly, a reasonably complete and accurate reporting system must provide for some methods of aggregation. It is anticipated that aggregation of large trader transactions and accounts amoung different broker-dealers will occur at the self-regulatory level or at the SEC through use of the unique large trader identifying number.

Section 13(h)(4)—Examinations.—Section 13(h)(4) requires that all records made by brokers and dealers pursuant to subsection (h) be subject at any time to periodic, special, and other examinations by representatives of the SEC. This requirements is complementary to section 17(b) of the Exchange Act, which applies to examination of persons subject to section 17(a) of the Exchange Act, including brokers and dealers.

Section 13(h)(5)—Considerations.—Section 13(h)(5) lists certain considerations the SEC must take into account in exercising its authority under section 13(h). Specifically, the SEC must consider: (i) existing reporting systems; (ii) the costs associated with maintaining information with respect to transactions effected by large traders and reporting such information to the SEC or an SRO; and (iii) the relationship between the U.S. and international securities markets.

Section 13(h)(6)—Exemptions.—Section 13(h)(6) provides the SEC with broad exemptive authority. Consistent with the purposes of the Exchange Act, the SEC could use this authority to act, by rule or order, to exempt any person, transaction, or class of pesons or transactions from the operation of subsection (h). The SEC may grant conditional, permanent or temporary exemptions.

Section 13(h)(7)—Confidentiality.—Section 13(h)(7) takes into account the confidential nature of the information to be recorded and reported under section 13(h). Accordingly, it provides that the SEC (or any other Federal department or agency) cannot be compelled to disclose any information required to be kept or reported under section 13(h) for which disclosure might otherwise be required pursuant to the Freedom of Information Act, 5 U.S.C. 552, or of any

other law. However, paragraph (7) does not authorize the SEC to withhold information from Congress, or prevent the SEC from complying with a request for information from any other Federal department or agency requesting the information or complying with an order of a court of the United States in any action commenced by the United States or the SEC. For purposes of section 552(b)(3)(B) of Title 5, U.S.C. section 13(h) shall be considered a statute described in that section.

Section 13(h)(8)—Definitions.—Section 13(h)(8) contains definitions for purposes of section 13(h).

Subparagraph (A) defines the term "large trader" to mean any person who, for his own account, or for an account for which he exercises investment discretion, effects transactions for the purchase or sale of any publicly-traded security by use of any means or instrumentality of interstate commerce or of the mails, or of any facility of a national securities exchange, directly or indirectly by or through a registered broker or dealer during any 24-hour period in an aggregate amount equal to or in excess of the identifying activity level (as defined in subparagraph (C) below. Large traders could include, among others, individuals, hedge funds, banks, broker-dealers, insurance companies, investment advisors, mutual funds, pension funds, and trust companies.

Subparagraph (B) defines the term "publicly-traded security" to mean any equity security (including an option on individual equity securities, and an option on an index or group of equity securities) listed, or admitted to unlisted trading privileges, on a national securities exchange or quoted in an automated inter-dealer quotation system. Although this definition is crafted in the singular form, it is intended to include baskets or indexes of securities within the definition of "publicly-traded security."

Subparagraph (C) defines the term "identifying activity level" as transactions (including a series of transactions) in any publicly-traded security at or above a level of volume, fair market value, or exercise value as shall be fixed from time to time by the SEC by rule.

Subparagraph (D) defines the term "reporting activity level" to mean transactions (including would include a series of transactions) in any publicly traded security at or above a level of volume, fair market value, or exercise value as shall be fixed from time to time by the SEC by rule or order. The SEC's authority to act by order is intended to permit it to set such levels flexibly in response to changing market conditions.

Subparagraph (E) defines the term "person." In addition to the definition contained in section 3(a)(9) of the Exchange Act, the term "person" is deemed to include two or more persons acting as a partnership, limited partnership, syndicate or other group, but for purposes of subsection (h) shall not include a foreign central bank.

SECTION 4: RISK ASSESSMENT

Section 4 of the bill adds a new subsection (h) to section 17 of the Exchange Act. The new subsection is intended to assist the SEC in obtaining information regarding the activities within broker-dealer

holding company systems that are reasonably likely to have a material impact on the financial and operational condition of registered broker-dealers. In conforming amendments made to the Government Securities Act, section 15C(b) of the Exchange Act also is amended to provide similar information to the Treasury and the appropriate regulatory agencies with respect to affiliates of registered government securities brokers and dealers.

The section references in the following analysis refer to section 17(h) of the Exchange Act, as amended by S. 648.

Section 17(h)(1)—Record-keeping and summary reporting.—Section 17(h)(1) requires every person who is a registered broker or dealer, or a registered municipal securities dealer for which the SEC is the appropriate regulatory agency (as that term is defined in section 3(a)(34)(A) of the Exchange Act) to obtain information and make and keep records regarding such registered person's policies, procedures, or systems for monitoring and controlling financial and operational risks to its resulting from the activities of any of its associated persons (as that term is defined in section 3(a)(18) of the Exchange Act). Section 17(h)(1) does not require information concerning the activities of any associated person that is a natural person.

The information and records to be kept by broker-dealer pursuant to section 17(h)(1), to be prescribed by the SEC by rule, shall describe in the aggregate each of the financial and securities activities conducted by, and customary sources of capital and funding of, those of the broker-dealer's associated persons whose business activities are reasonably likely to have a material impact on the financial or operational condition of such registered person, including its net capital, its liquidity or its ability to conduct or finance its operations.

The term "associated person" of a broker-dealer is defined in section 3(a)(18) of the Exchange Act and includes, *inter alia*, affiliated companies of a registered broker-dealer, including its parent and subsidiaries. The phrase "associated persons whose business activities are likely to have a material impact on the financial or operational condition" of broker-dealers is intended to describe generally those associated persons whose business activities can reasonably be expected to have a material impact on the broker-dealer's net capital, liquidity or ability to conduct or finance its operations. Whether an associated person of a broker-dealer meets this materiality standard would depend upon the facts and circumstances. However, it is the view of the Committee that, when in the judgment of the SEC, an affiliate's activities are material to the financial or operational condition of a broker-dealer, the SEC shall have access to information concerning that affiliates.

Section 17(h)(1) provides that the records shall describe activities "in the aggregate." The term "aggregate" is intended to describe the level of detail in the information that broker-dealers would have to obtain and maintain concerning their affiliates. Generally, broker-dealers would obtain information necessary to determine and report aggregate information regarding each associated person's financial and securities activities. For example, broker-dealers would obtain and maintain records of the outstanding amount of bridge loans of each of its associated persons meeting the materi-

ality standard discussed above, as well as sufficient information to determine whether there exists any significant concentration of bridge loans (combined with other financing) involving a single contra party. Similarly, records would contain identification of, and other relevant information regarding, loans in which the interest or principal payments are in default or in which the borrower is otherwise financially troubled. However, the details and terms of specific transactions normally would not be recorded separately but would be included in aggregate data with respect to each affiliate, except where a single transaction might be so large as to threaten materially the financial condition of the broker-dealer.

The term "financial and securities activities" includes, but is not limited to, activities of securities brokers or dealers; futures, forward and spot market commodity and currency transactions; commercial paper factoring and dealing; purchases of financial assets for sale as securities; merchant banking (including bridge financing); insurance (excluding actuarial determinations of mortality or morbidity risks or loss reserves, and insurance underwriting activities ensuring a proper distribution of policyholders' risk); the business of lending; real estate development (other than real estate development for use wholly or substantially by the broker-dealer, its holding company, or its other affiliates); and taking principal risk or otherwise operating a matched book in connection with the exchange of interest rate or foreign currency obligations.

The record-keeping and reporting obligations would not extend to non-financial, non-securities activities, such as manufacturing, construction (other than equity investments or financing), merchandising, travel services, real estate brokerage, publishing, or non-securities-related information processing.

Section 17(h)(1) also enables the SEC, by rule, to require summary reports of the information kept pursuant to this paragraph to be filed with the SEC no more frequently than quarterly. This section is intended to provide the SEC with authority to obtain summary information necessary to assess the potential impact of an associated person's financial and securities activities on the registered broker-dealer. Such information is critical for the SEC's monitoring purposes and would also serve to provide the SEC with relatively recent data in the event of a market emergency.

Section 17(h)(2)—Special reports.—Section 17(h)(2) authorizes the SEC to require special reports from registered brokers and dealers as well as registered municipal securities dealers, government securities brokers, and government securities dealers for which the SEC is the appropriate regulatory agency (collectively. registered persons). Special reports could contain additional, or more detailed, or more current information than is required pursuant to paragraph (h)(1) concerning the financial and securities activities of any of such registered person's associated persons that meet the subsection's materiality standard, *i.e.*, an associated person, other than a natural person, whose business activities are reasonably likely to have a material impact on the financial or operational condition of the registered person.

The authority granted to the SEC by section 17(h)(2) may be exercised if, as a result of adverse market conditions or based on the summary information provided to the SEC pursuant to section

17(h)(1) or other available information, the SEC reasonably concludes that it had concerns regarding the financial or operational condition of a specific registered person. Pursuant to section 17(h)(2), the SEC could require immediate, particularized information and reports from the registered person, without rulemaking.

For example, pursuant to this authority, the SEC could require registered persons to obtain information and to report promptly the trading positions and outstanding borrowing or lending transactions of each of their affiliates whose business activities are reasonably likely to have a material impact on the financial or operational condition of the registered firm.

The SEC, in requiring special reports under section 17(h)(2), must specify the information required, the period for which it is required, the time and date on which the information must be furnished, and whether the information is to be furnished directly to the SEC or to an SRO with primary responsibility for examining the registered person's financial and operational condition. The Committee anticipates that persons providing such reports and information at the request of the SEC would do so within the time frames specified and that failure to do so would, under appropriate circumstances, be prosecuted as a violation of this provision.

Section 17(h)(3)—SEC exemptive authority.—Section 17(h)(3) permits the SEC to provide exemptions by rule or order from the record-keeping and reporting requirements under section 17(h) and rules promulgated thereunder. The SEC is authorized to establish terms and conditions and time periods for such exemptions.

In granting such exemptions, the SEC is required to consider, among other factors: (A) whether information of the type required by the section is available to the SEC from another supervisory agency (as defined in section 1101(6) of the Right to Financial Privacy Act of 1978 (12 U.S.C. 3401(6))), a State insurance commission or similar State agency, the Commodity Futures Trading Commission, or a similar foreign regulator; (B) the primary business of any associated person; (C) the nature and extent of domestic or foreign regulation of the associated person's activities; (D) the nature and extent of the registered person's securities activities; and (E) with respect to the registered person and its associated persons, on a consolidated basis, the amount and proportion of assets devoted to, and revenues derived from, activities in the United States securities markets.

Section 17(h)(4)—Confidentiality.—Section 17(h)(4) of the bill provides that, notwithstanding the provisions of any law, the SEC shall not be compelled to disclose any information required to be reported under this subsection or any information supplied to the SEC by any domestic or foreign regulatory agency that relates to the financial or operational condition of any associated person of a registered broker, dealer, government securities broker, government securities dealer or municipal securities dealer.

Section 17(h)(4) specifies that the SEC is not authorized to withhold information from Congress or prevented from providing information to any other Federal department or agency requesting the information for purposes within the scope of its jurisdiction, or from complying with an order of a court of the United States in an action commenced by the United States or the SEC.

Section 17(h) shall be considered a statute described in section 552(b)(3)(B) of Title 5, U.S.C. (the Freedom of Information Act).

Conforming amendments to the Government Securities Act

The section references in the following analysis refer to section 15C(b) of the Exchange Act, as amended by S. 648.

Section 15C(b)(2)(A)—Record-keeping and summary reporting.—Section 15C(b)(2)(A) amends the Exchange Act to give the Secretary of the Treasury rulemaking authority with respect to government securities brokers and dealers registered under section 15C of the Exchange Act comparable to that provided to the SEC under section 17(h)(1). Accordingly, the Secretary's rulemaking authority would be directed at those government securities brokers and dealers that are registered solely as government securities brokers and dealers and not those that are registered brokers or dealers or financial institutions. Under paragraph (A), the Secretary also may require summary reports of information to be filed with it as well as the registered person's appropriate regulatory agency no more frequently than quarterly.

Under paragraph (B), the Secretary and the appropriate regulatory agency for any registered government securities broker or dealer are given authority to request more detailed reports to the same extent as the authority given the SEC under section 17(h)(2). Thus, both the Secretary and the appropriate regulatory agency would be able to monitor the financial condition of registered government securities broker-dealer holding company affiliates, particularly in periods of market stress. This is an expansion of the Treasury's role under the Government Securities Act, where it acts primarily as a rulemaker. In this context, the Secretary would be able to call directly for financial information, rather than obtaining it from an appropriate regulatory agency under section 15C(d)(2) of the Exchange Act. With respect to the authority of the appropriate regulatory agency, this section restates authority given the SEC under proposed section section 17(h)(2). However, to the extent a registered government securities broker or dealer is a person whose appropriate regulatory agency is not the SEC, this section assures that the appropriate regulatory agency will have access to risk assessment information.

Paragraph (C) provides the Secretary with exemptive authority to the same extent as that provided to the SEC under section 17(h)(3).

Paragraph (D) specifies that, in exercising authority pursuant to section 15C(b)(2)(A) with respect to associated persons of government securities brokers and government securities dealers who are also associated persons of registered brokers or dealers reporting to the SEC pursuant to section 17(h), the Secretary's requirements relating to such associated person would have to conform, to the greatest extent practicable, to the reporting and record-keeping requirements established by the SEC under section 17(h).

Paragraph (E) mirrors the confidentiality provision of section 17(h)(4).

SECTION 5: COORDINATED CLEARING

This section of the bill directs the SEC and the Commodity Futures Trading Commission ("CFTC") to facilitate linked or coordinated facilities for clearance and settlement of transactions in securities, securities options, contracts of sale for future delivery and options thereon, and commodity options. In addition, this section gives the SEC authority to adopt rules concerning the transfer and pledge of securities other than government securities, where the SEC determines that the absence of federal rules substantially impedes the safe and efficient operation of the national system for the clearance and settlement of securities transactions.

The section references in the following analysis refer to section 17A of the Exchange Act, as amended by S. 648, unless otherwise indicated.

Section 17A(a)(2)(A)—SEC authority to facilitate linked and coordinated clearance and settlement.—Section 17A(a)(2)(A) reiterates the direction to the SEC under current Section 17A(2) to use its authority under the Exchange Act to facilitate the establishment of a national system for the prompt and accurate clearance and settlement of transactions in securities (other than exempt securities). It adds new direction to the SEC to facilitate the establishment of linked or coordinated facilities for clearance and settlement of transactions in securities, securities options, contracts of sale for future delivery and options thereon, and commodity options. Section 17A(a)(2)(A) does not mandate any particular clearance or settlement system structure or facility. The considerations to be used by the SEC in exercising its new authority are those set forth under current Section 17(A)(2): the public interest, the protection of investors, the safeguarding of securities and funds, and maintenance of fair competition among brokers and dealers, clearing agencies, and transfer agents.

Section 17A(a)(2)(B)—SEC consultation with other regulators.—Section 17A(a)(2)(B) reiterates the direction to the SEC to use its authority under the Exchange Act to assure equal regulation of registered clearing agencies and registered transfer agents. This section adds the direction to the SEC to consult with the CFTC and the Board of the Federal Reserve System in carrying out its responsibilities as to futures and their related concerns.

Section 17A(f)(1)—Transfer and pledge of securities.—Section 17A(f)(1) authorizes the SEC to promulgate rules concerning the transfer of certificated and uncertificated securities (including security interests therein). This section would authorize the SEC to preempt state commercial laws (such as those based on the Uniform Commercial Code) governing the transfer of securities (including choice and conflict of laws provisions), but only upon making three findings: (A) that the rule is necessary or appropriate for the protection of investors or in the public interest and is reasonably designed to promote the prompt, accurate, and safe clearance and settlement of securities transactions; (B) that in the absence of a uniform rule, the safe and efficient operation of the national system for clearance and settlement of securities transactions will be, or is, substantially impeded; and (C) that to the extent such rule will impair or diminish directly or indirectly rights of investors under

State law concerning transfer of securities (or limited interests therein), that the benefits of such rule exceed the detriment to investors. The SEC would not be authorized to promulgate rules with respect to government securities issued pursuant to Chapter 31 of Title 31, United States Code, or securities otherwise processed within a book-entry system operated by the Federal Reserve Banks.

In making the above determinations, the SEC is required to consider the recommendations of the federal advisory committee established under section 17A(f)(2). The SEC also is required to consult with the Secretary of the Treasury and the Board of Governors of the Federal Reserve System before adopting any rule pursuant to this section. If the Secretary of theTreasury shall object, in writing, to the SEC's finding with respect to the factors set forth above, the SEC must consider all feasible alternatives to the proposed rule, and it shall not adopt any such rule unless the SEC makes an explicit determination that the rule is the most practicable method for achieving safe and efficient operation of the national clearance and settlement system.

Section 17A(f)(2)—Establishment of a Federal Advisory Committee.—Section 17A(f)(2)(A) directs the SEC to establish a Federal advisory committee in accordance with the Federal Advisory Committee Act within ninety days after the effective date of this section. The Advisory Committee would be required to consider and report on such matters as the SEC determines, including the areas, if any, where State commercial laws and related Federal laws concerning the transfer of certificated or uncertificated securities, limited interest (including security interests) in such securities, or the creation or perfection of security interests in such securities do not provide the necessary certainty, uniformity, and clarity for purchasers, sellers, investors, financial intermediaries, and lenders concerning their respective rights and obligations. The SEC is directed to consult with the Secretary of the Treasury and the Board of Governors of the Federal Reserve System in developing the Advisory Committee's charter and composition.

Under section 17A(f)(2)(B), the Advisory Committee shall consist of 15 members. The Secretary of the Treasury and the Board of Governors of the Federal Reserve System would each be authorized to designate two members of the Advisory Committee, with the SEC designating the remaining 11 members. It is expected that any Advisory Committee established in accordance with this section will include at least several individuals with substantial expertise in commercial, securities, banking or bankruptcy law, whether as academicians or as practitioners.

Under section 17A(f)(2)(C), the Advisory Committee is directed to report to the SEC within six months (or such longer time as the SEC may designate) and to deliver copies of such report to the Secretary of the Treasury and the Chairman of the Board of Governors of the Federal Reserve System.

The section references in the following analysis refer to section 5c of the Commodity Exchange Act, as added by S. 648.

Section 5c—Coordinated facilities for clearance and settlement of certain contract and options.—Section 5c(a) requires the CFTC, with due regard for the public interest and maintenance of fair competition among contract markets, commodities and futures clearing or-

ganizations, members thereof, and futures commission merchants, to facilitate the establishment of linked or coordinated facilities for clearance and settlement of contracts of sale for future delivery and options thereon, commodity options, securities and securities options. In carrying out these responsibilities, the CFTC is required to consult with the SEC and the Board of Governors of the Federal Reserve System.

SECTION 6: REPORTS TO CONGRESS

This section of the bill requires the SEC and the CFTC, in consultation with the Board of Governors of the Federal Reserve System, to report to Congress on progress toward establishing linked or coordinated facilities for clearance and settlement. In addition, the Secretary of the Treasury and the Chairmen of the SEC, CFTC and the Federal Reserve each would be required to report on an annual basis for five years on their efforts to coordinate financial market regulation. Finally, this section would require the SEC to report within 90 days after enactment of this legislation on whether it has sufficient authority to prohibit securities trading practices in order to protect against market manipulation or fraud through program trading and other practices that may be inconsistent with the SEC's mission to protect investors.

The section references in the following analysis refer to section 6 of the Market Reform Act.

Section 6(a)—Facilities for clearance and settlement.—Section 6(a) would require the SEC and the CFTC, in consultation with the Federal Reserve, to examine progress toward establishing linked or coordinated facilities for clearance and settlement of transactions in securities, securities options, contracts of sale for future delivery and options thereon, and commodity options. The SEC and the CFTC are required to submit a report to Congress, not later than one year from the date the bill is enacted, which details and evaluates this progress.

Section 6(b)—Coordinated mechanisms and margin levels.—Section 6(b) requires the Secretary of the Treasury and the Chairmen of the SEC, CFTC and the Federal Reserve to report to Congress annually for five years on the efforts they have made relating to the coordination of regulatory activities to ensure the integrity and competitiveness of United States financial markets, their efforts to formulate coordinated mechanisms across marketplaces to protect the payments and market systems during market emergencies, and their views on the adequacy of margin levels and the use of leverage by market participants. In addition, the Secretary and the Chairmen each would report on other issues and concerns relating to the soundness, stability and integrity of domestic and international capital markets as may be appropriate.

Section 6(c)—SEC authority over market manipulation.—Section 6(c) requires the SEC to report to the Committee on Banking, Housing and Urban Affairs of the Senate and the Committee on Energy and Commerce of the House of Representatives on whether the SEC has sufficient statutory authority (a) to prohibit practices in the purchase and sale of securities to protect against market manipulation or fraud through program trading, and (b) to prohibit

any other practices or activities that are inconsistent with the statutory mission of the SEC to protect shareholders and investors. This report is required no later than 90 days after enactment of this bill. If the SEC concludes that it lacks such authority, section 6(c) would require the SEC to include in its report recommendations for legislative action to confer such authority.

Regulatory Impact Statement

In compliance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following statement regarding the regulatory impact of the bill. This bill will clarify and broaden the authority of the SEC to suspend trading and take other temporary action during market emergencies, authorize the SEC to establish an information-gathering and reporting system for activity by large traders in the securities markets, authorize the SEC to establish an information-gathering and reporting system for brokers and dealers with respect to their affiliates' financial and securities activities that are reasonably likely to have a material impact on the condition of the brokers and dealers, direct the SEC and CFTC to work to facilitate the establishment of linked or coordinated facilities for the clearance and settlement of transactions in stocks, options and futures, give the SEC authority to promulgate rules concerning the transfer and pledge of securities, and direct the Secretary of the Treasury and the Chairmen of the Federal Reserve, SEC and CFTC to report annually on their efforts to coordinate regulatory activity over the U.S. financial markets, with minimal overall increase in the regulatory burden.

Changes in Existing Law

In the opinion of the Committee, it is necessary to dispense with the requirement of subsection 12 of rule XXVI of the Standing Rules of the Senate in order to expedite the business of the Senate.

Cost of the Legislation

The Committee has requested a cost estimate of this legislation under the provisions of Section 403 of the Conressional Budget Act of 1974. The cost estimate of the Congressional Budget Office appears below:

Congressional Budget Office,
U.S. Congress,
Washington, DC, January 18, 1990.

Hon. Donald W. Riegle, Jr.,
Chairman, Committee on Banking, Housing, and Urban Affairs,
U.S. Senate, Washington, DC.

Dear Mr. Chairman: The Congressional Budget Office has reviewed S. 648, the Market Reform Act of 1989, as ordered reported by the Senate Committee on Banking, Housing, and Urban Affairs, November 16, 1989. We estimate that enactment of this bill would result in additional costs to the federal government of about $1 million annually.

S. 648 would grant the Securities and Exchange Commission (SEC) additional authorities to regulate certain stock market activi-

ties. Specifically, the bill would allow the SEC to suspend trading in the event of a major market disturbance that could threaten the fair and orderly operation of the markets. In addition, S. 648 would allow the SEC to collect new information on securities firms making very large trades. The bill would require securities brokers and dealers to maintain detailed records regardng their procedures for monitoring and controlling the financial and operational risks of their activities. Finally, the bill would require the SEC and the Commodity Futures Trading Commission, in consultation with the Board of Governors of the Federal Reserve System and the Secretary of Treasury, to develop coordinated methods to settle stock and futures transactions.

Based on information provided by the SEC, we expect that the additional responsibilities placed on the SEC (i.e. establishment of new rules and regulations, risk assessment and surveillance, and preparation of reports) would cost about $1 million annually. The costs incurred by other federal agencies affected by this bill would not be significant.

No costs would be incurred by state or local governments as a result of enactment of this bill.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Douglas Criscitello, who can be reached on 226-2860.

Sincerely,

ROBERT D. REISCHAUER, *Director.*

ADDITIONAL VIEWS OF SENATORS GRAMM, GARN, D'AMATO, BOND, MACK, SANFORD, ROTH, AND PRESSLER

One of the fundamental principles of our Federal system of government is the division of powers between the State and Federal Governments. That division should be altered only with the greatest of care and upon the demonstration of the most pressing need. We are concerned that one provision of this bill, Section 5(b), while intended to address an important concern, explicitly authorizes a Federal agency, the Securities and Exchange Commission, to preempt State law. We believe that the power granted to the Commission under Section 5(b) to prempt State law should be reserved to the Congress.

While we do not question the need to take action to provide for an adequate clearing system for our securities markets, we do not think it appropriate to grant a Federal agency its own authority, and without further congressional action, to preempt State law in order to achieve that objective. We would prefer that the SEC be directed to examine the problem and recommend legislative solutions, leaving it to the Congress to take the appropriate action, including Federal preemption where a compelling case for such preemption can be made. We do not feel that an unelected body of Federal regulators will have the same concern for the rights of States as will the elected representatives of those States and their citizens. Neither, however, do we feel that the Congress would hesitate to take action, including Federal preemption, should the SEC make a compelling case that such measures were needed for the safety and proper functioning of our national securities markets.

To grant explicit authority to Federal agencies to override State laws can lead to a serious erosion in the division of power between the States and the Federal Government. We hope that this provision of the bill will be changed so as to reserve this power to the Congress, where the Federal system of Government is likely to find better protection.

PHIL GRAMM.
ALFONSE M. D'AMATO.
CHRISTOPHER S. BOND.
CONNIE MACK.
TERRY SANFORD.
WILLIAM V. ROTH, Jr.
LARRY PRESSLER.
JAKE GARN.